

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: July 26, 2005, 14:23:24 ; Search time 42 Seconds  
(without alignments)  
207.951 Million cell updates/sec

Title: US-10-659-782B-32

Perfect score: 620

Sequence: 1 MPSPGVCSLLILGMLMDL.....PPSRERSRRSHQSPCL 117

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	198	31.9	117	3	US-09-046-479-2
2	198	31.9	117	3	US-08-822-897C-2
3	198	31.9	117	4	US-09-608-810A-4
4	198	31.9	117	4	US-09-404-417A-2
5	198	31.9	117	4	US-09-794-987-2
6	74	11.9	597	4	US-09-949-016-7800
7	73.5	11.9	569	4	US-09-252-991A-27248
8	71.5	11.5	201	4	US-09-902-540-13645
9	71.5	11.5	643	4	US-09-252-991A-21569
10	70.5	11.4	382	4	US-09-949-016-10513
11	70.5	11.4	383	2	US-08-391-916A-4
12	70.5	11.4	383	4	US-09-764-803B-23
13	70.5	11.4	393	4	US-09-248-796A-19806
14	70	11.3	18	4	US-09-404-417A-11
15	69.5	11.2	835	4	US-09-949-016-7379
16	68	11.0	995	5	PCT-US95-04910-14
17	67.5	10.9	168	4	US-09-252-991A-17387
18	67.5	10.8	396	4	US-09-134-000C-4470
19	67	10.8	449	2	US-08-489-666C-3
20	67	10.8	449	2	US-08-911-092-3
21	67	10.8	449	2	US-08-485-001B-3
22	67	10.8	449	3	US-08-454-121A-3
23	67	10.8	449	3	US-08-483-151B-3
24	67	10.8	449	3	US-09-057-963A-2
25	67	10.8	449	3	US-09-252-991A-23944
26	66.5	10.7	263	2	US-08-391-916A-8
27	66.5	10.7	311	2	US-08-391-916A-6

28	66	10.6	508	4	US-09-252-991A-27892	Sequence 27892, A
29	66	10.6	1122	4	US-09-042-460-2	Sequence 2, Appli
30	65	10.5	303	6	5340934-13	Patent No. 5340934
31	65	10.5	303	6	5340934-13	Patent No. 5340934
32	65	10.5	431	3	US-08-845-258-34	Sequence 34, Appli
33	65	10.5	431	3	US-08-990-571-34	Sequence 34, Appli
34	65	10.5	431	3	US-08-723-122A-34	Sequence 34, Appli
35	65	10.5	431	4	US-09-528-784A-34	Sequence 34, Appli
36	65	10.5	431	4	US-09-569-098A-34	Sequence 34, Appli
37	65	10.5	449	1	US-07-917-722-2	Sequence 2, Appli
38	65	10.5	466	3	US-09-724-864-44	Sequence 44, Appli
39	64.5	10.4	263	4	US-09-252-991A-20756	Sequence 20756, A
40	64	10.3	312	4	US-09-902-540-14391	Sequence 14391, A
41	64	10.3	637	4	US-09-949-016-10956	Sequence 10956, A
42	64	10.3	1062	4	US-09-902-540-16313	Sequence 16313, A
43	63.5	10.2	250	4	US-09-248-796A-19737	Sequence 19737, A
44	63.5	10.2	334	3	US-09-218-363-11	Sequence 11, Appli
45	63	10.2	193	4	US-09-252-991A-24544	Sequence 24544, A

## ALIGNMENTS

RESULT 1  
US-09-046-479-2

Sequence 2, Application US/09046479  
Patent No. 6291653

GENERAL INFORMATION:

APPLICANT: Sheppard, Paul O.

APPLICANT: Delaher, Theresa A.

TITLE OF INVENTION: MOTILIN HOMOLOGS

NUMBER OF SEQUENCES: 7

CORRESPONDENCE ADDRESS:

ADDRESSEE: ZymoGenetics, Inc.

STREET: 1201 Eastlake Avenue East

CITY: Seattle

STATE: WA

COUNTRY: USA

ZIP: 98102

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: FastSeq for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/046,479

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER:

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Sawislak, Deborah A

REGISTRATION NUMBER: 37,438

REFERENCE/DOCKET NUMBER: 97-04

TELECOMMUNICATION INFORMATION:

TELEPHONE: 206-442-6672

TELEFAX: 206-442-6678

TELEX:

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 117 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: protein

FRAGMENT TYPE: internal

US-09-046-479-2

Query Match 31.9%; Score 198; DB 3; Length 117;

Best Local Similarity 88.6%; Pred. No. 3e-17;

Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;



APPLICATION NUMBER: US/09/794,987  
FILING DATE: 27-Feb-2001  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/046,479  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Sawislak, Deborah A  
REGISTRATION NUMBER: 37,438  
REFERENCE/DOCKET NUMBER: 97-04  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 206-442-6672  
TELEFAX: 206-442-6678  
TELEX: <Unknown>  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 117 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
FRAGMENT TYPE: internal  
SEQUENCE DESCRIPTION: SEQ ID NO: 2:  
US-09-794-987-2

Query Match 31.9%; Score 198; DB 4; Length 117;  
Best Local Similarity 88.6%; Pred. No. 3e-17;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 MSPGTVCSTLLIGLWMLDLAMAGSSFLSPHQVQVPPHKA 44  
DB 1 MSPGTVCSTLLIGLWMLDLAMAGSSFLSPHQVQVPPHKA 44

RESULT 6  
US-09-949-016-7800  
Sequence 7800, Application US/09949016  
Patent No. 6812339  
GENERAL INFORMATION:  
APPLICANT: VENTER, J. Craig et al.  
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED  
FILE REFERENCE: C1001307  
CURRENT APPLICATION NUMBER: US/09/949,016  
CURRENT FILING DATE: 2000-04-14  
PRIOR APPLICATION NUMBER: 60/241,755  
PRIOR FILING DATE: 2000-10-20  
PRIOR APPLICATION NUMBER: 60/237,768  
PRIOR FILING DATE: 2000-10-03  
PRIOR APPLICATION NUMBER: 60/231,498  
PRIOR FILING DATE: 2000-09-08  
NUMBER OF SEQ ID NOS: 207012  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 7800  
LENGTH: 597  
TYPE: PRT  
ORGANISM: Human  
US-09-949-016-7800

Query Match 11.9%; Score 74; DB 4; Length 597;  
Best Local Similarity 27.4%; Pred. No. 1.7;  
Matches 34; Conservative 15; Mismatches 35; Indels 40; Gaps 6;

QY 3 SPGVTCSTLLIGLWMLDLAMAGSSFLSPHQVQVPPHKA 44  
DB 152 SPGVTCSTLLIGLWMLDLAMAGSSFLSPHQVQVPPHKA 211  
QY 45 H-----VVPALPLSNQCDLEQQRHMAVSGSTDSGSDLTGSGRTGAVLNL 97  
DB 212 DSGRMSVLEQLP-----ELC-----FSQVIREGHAIVVMAQLOGKLVATKAF 256  
QY 98 PPSS 101  
|||

DB 257 PPRS 260

RESULT 7  
US-09-252-991A-27248  
Sequence 27248, Application US/09252991A  
Patent No. 6551795  
GENERAL INFORMATION:  
APPLICANT: Marc J. Rubenfield et al.  
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS  
FILE REFERENCE: 107196.136  
CURRENT APPLICATION NUMBER: US/09/252,991A  
CURRENT FILING DATE: 1999-02-18  
PRIOR APPLICATION NUMBER: US 60/074,788  
PRIOR FILING DATE: 1998-02-18  
PRIOR APPLICATION NUMBER: US 60/094,190  
PRIOR FILING DATE: 1998-07-27  
NUMBER OF SEQ ID NOS: 33142  
SEQ ID NO 27248  
LENGTH: 569  
TYPE: PRT  
ORGANISM: Pseudomonas aeruginosa  
US-09-252-991A-27248

Query Match 11.9%; Score 73.5; DB 4; Length 569;  
Best Local Similarity 31.3%; Pred. No. 1.9;  
Matches 31; Conservative 9; Mismatches 34; Indels 25; Gaps 4;

QY 9 STLLIGLWMLDLAMAGSSFLSPHQVQVPPHKAHVVPALPLSNQCDLEQQRHMA 68  
DB 434 STLLIGLWMLDLAMAGSSFLSPHQVQVPPHKAHVVPALPLSNQCDLEQQRHMA 68

QY 69 VFSQSTDSGSDLTGSGRTGAVLNLFPSSGRSRR 107  
DB 474 AFREDIDPAALRLVAR-----KKLQRLQLEADASRRERR 507

RESULT 8  
US-09-902-540-13645  
Sequence 13645, Application US/09902540  
Patent No. 6833447  
GENERAL INFORMATION:  
APPLICANT: Goldman, Barry S.  
APPLICANT: Hinkle, Gregory J.  
APPLICANT: Slater, Steven C.  
APPLICANT: Miegand, Roger C.  
TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof  
FILE REFERENCE: 38-10(15849)B  
CURRENT APPLICATION NUMBER: US/09/902,540  
CURRENT FILING DATE: 2001-07-10  
PRIOR APPLICATION NUMBER: 60/217,883  
PRIOR FILING DATE: 2000-07-10  
NUMBER OF SEQ ID NOS: 16825  
SEQ ID NO 13645  
LENGTH: 201  
TYPE: PRT  
ORGANISM: Myxococcus xanthus  
US-09-902-540-13645

Query Match 11.5%; Score 71.5; DB 4; Length 201;  
Best Local Similarity 27.6%; Pred. No. 0.76;  
Matches 32; Conservative 13; Mismatches 42; Indels 29; Gaps 6;

QY 10 LLLIGLWMLDLAMAGSSFLSPHQVQVPPHKAHVVPALPLSNQCDLEQQRHMA 65  
DB 7 VLVGVGL-ASSAGA-----QEARPPHRSPT-TPAWAPRGVLLGVSADQGLVASQ 56  
QY 66 -----WASVFSQSTDSGSDLTGSGRTGAVLNLFP-----PSSRRRSRRSHQ 111  
DB 57 TKVQWQFTFYQDRKDAFALLLEGLSWGL-----AFPDABEGKQNAVRNSFYQHP 107

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RESULT 9
US-09-252-991A-21569
; Sequence 21569, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 21569
; LENGTH: 643
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-21569

Query Match          11.5%; Score 71.5; DB 4; Length 643;
Best Local Similarity 25.7%; Pred. No. 4;
Matches 37; Conservative 17; Mismatches 47; Indels 43; Gaps 8;

QY 2 PSPGTV--CSLLILGML-----WDLAMGSSFLSPHQVQVPRPHKAPHV 46
DB 389 PSAQOMSCSGVIGRSSAPRPNRLIAEPWA-LTRPASSM-PGNSTIVAPWMA-- 443
QY 47 VPALPLSNQDLQOQRLH-----ASVFSQSTKDSGLTVS-----GRTWGLRVLNRLFP 98
DB 444 -----CSRATRAIWPSPRMSAMSRSTTTPAGSTGTIOGSRRSKGLRTGLMAAH 493
QY 99 PSSRSRRSRHQSPC-----SPEL 117
DB 494 PGRAGSRKTYRASAGARVNPOL 517

RESULT 10
US-09-949-016-10513
; Sequence 10513, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: C1001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10513
; LENGTH: 382
; TYPE: PRT
; ORGANISM: Human
US-09-949-016-10513

Query Match          11.4%; Score 70.5; DB 4; Length 382;
Best Local Similarity 22.0%; Pred. No. 2.6;
Matches 27; Conservative 20; Mismatches 37; Indels 39; Gaps 4;

QY 1 MSPRGTVCSSLILGMLDLMAGSSFLSPHQVQVPRPHKAPHVVALPLSN----- 54
DB 61 IPKGAQAQCICTIYCEBDSYLAGTGLSAAPQAVQDN-----PAMPPTSSGSGENV 111
QY 55 QLCDLEQOQRLH-----ASVFSQSTKDS-----GSDLTVSGRTWGL 90
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DB 112 KICSLFEAQIWKQKSAEIRYIMDKSRRRLALICNEBFDSPRRYGAEDITGWTML 171
QY 91 RVL 93
DB 172 QNL 174

RESULT 11
US-08-391-916A-4
; Sequence 4, Application US/08391916A
; Patent No. 5856169
; GENERAL INFORMATION:
; APPLICANT: Litwack, Gerald
; APPLICANT: Alnemri, Emad S.
; APPLICANT: Fernandez-Alnemri, Teresa
; TITLE OF INVENTION: ISOFORMS OF HUMAN INTERLEUKIN-1BETA CONVERTING
; TITLE OF INVENTION: ENZYME AND METHODS OF USING THE SAME
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock, Washburn, Kurtz, Mackiewicz & No. 5856169-18
; STREET: One Liberty Place, 46th floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: USA
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: Windows
; SOFTWARE: Wordperfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/391,916A
; FILING DATE: 21-FEB-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Deluca, Mark
; REGISTRATION NUMBER: 33,229
; REFERENCE/DOCKET NUMBER: TJU-1464
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 568-3100
; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 383 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-391-916A-4

Query Match          11.4%; Score 70.5; DB 2; Length 383;
Best Local Similarity 22.0%; Pred. No. 2.6;
Matches 27; Conservative 20; Mismatches 37; Indels 39; Gaps 4;

QY 1 MSPRGTVCSSLILGMLDLMAGSSFLSPHQVQVPRPHKAPHVVALPLSN----- 54
DB 62 IPKGAQAQCICTIYCEBDSYLAGTGLSAAPQAVQDN-----PAMPPTSSGSGENV 112
QY 55 QLCDLEQOQRLH-----ASVFSQSTKDS-----GSDLTVSGRTWGL 90
DB 113 KICSLFEAQIWKQKSAEIRYIMDKSRRRLALICNEBFDSPRRYGAEDITGWTML 172
QY 91 RVL 93
DB 173 QNL 175

RESULT 12
US-09-764-803B-23
; Sequence 23, Application US/09764803B
; Patent No. 6759227
; GENERAL INFORMATION:
; APPLICANT: Van de Craen, Marc
```

APPLICANT: Declercq, Wim  
APPLICANT: Vandemabele, Peter  
TITLE OF INVENTION: NEW CASPASE HOMOLOGUE  
FILE REFERENCE: 2676-4661US  
CURRENT APPLICATION NUMBER: US/09/764,803B  
CURRENT FILING DATE: 2001-01-17  
PRIOR APPLICATION NUMBER: PCT/EP99/04939  
PRIOR FILING DATE: 1999-07-12  
PRIOR APPLICATION NUMBER: EP 98202422.6  
PRIOR FILING DATE: 1999-07-17  
NUMBER OF SEQ ID NOS: 26  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 23  
LENGTH: 383  
TYPE: PRT  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: SITE  
LOCATION: (1)..(383)  
OTHER INFORMATION: human capase-1 (genbank)  
US-09-764-803B-23

Query Match 11.4%; Score 70.5; DB 4; Length 383;  
Best Local Similarity 22.0%; Pred. No. 2.6;  
Matches 27; Conservative 20; Mismatches 37; Indels 39; Gaps 4;

QY 1 MPESTVSLILGLMLDLAMAGSSFLSPHQRVQVRPPHKAHVVPALPLSN----- 54  
DB 62 IPKGAQACICITCYCEEDSYLACTLGLSAAPOAVQDN-----PAMPTSSGSEGNV 112

QY 55 QLCDEQQRHLW-----ASVFSQSTKDS-----GSDLTVSQRTWGL 90  
DB 113 KCLSEERQIRMKQKASAIYPIIMDKSRRLALITCNEEPSIPRTAEVDITGMTLL 172

QY 91 RVL 93  
DB 173 QNL 175

RESULT 13  
US-09-248-796A-19806  
; Sequence 19806, Application US/09248796A  
; Patent No. 6747137  
; GENERAL INFORMATION:  
; APPLICANT: Keith Weinstock et al  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN  
; FILE REFERENCE: 107196.132  
; CURRENT APPLICATION NUMBER: US/09/248,796A  
; PRIOR FILING DATE: 1999-02-12  
; PRIOR APPLICATION NUMBER: US 60/074,725  
; PRIOR FILING DATE: 1998-02-13  
; PRIOR APPLICATION NUMBER: US 60/096,409  
; PRIOR FILING DATE: 1998-08-13  
; NUMBER OF SEQ ID NOS: 28208  
; SEQ ID NO 19806  
; LENGTH: 393  
; TYPE: PRT  
; ORGANISM: Candida albicans  
US-09-248-796A-19806

Query Match 11.4%; Score 70.5; DB 4; Length 393;  
Best Local Similarity 31.6%; Pred. No. 2.7;  
Matches 24; Conservative 12; Mismatches 23; Indels 17; Gaps 4;

QY 39 PPHKAPHVVPALPLSNQCLDEQQRHLWASVFSQS-----TKDSGSDLTVSQRT 87  
DB 185 PPPAPQQLPSLPTYSMETESQOQHYSQDSQSHHQPAPSAITDSSASTATTNT 244

QY 88 WGLRV-----LNRLLP 98  
DB 245 MPFOVSTVIDINR--FP 259

RESULT 14  
US-09-404-417A-11  
; Sequence 11, Application US/09404417A  
; Patent No. 6627729  
; GENERAL INFORMATION:  
; APPLICANT: Sheppard, Paul O.  
; APPLICANT: Deisher, Theresa A.  
; APPLICANT: Jaspers, Stephen R.  
; TITLE OF INVENTION: TML PEPTIDES  
; FILE REFERENCE: 97-04C1  
; CURRENT APPLICATION NUMBER: US/09/404,417A  
; CURRENT FILING DATE: 1999-09-23  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 11  
; LENGTH: 18  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-404-417A-11

Query Match 11.3%; Score 70; DB 4; Length 18;  
Best Local Similarity 93.3%; Pred. No. 0.038;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 24 GSSFLSPHQRVQVR 38  
DB 1 GSSFLSPHQRVQVR 15

RESULT 15  
US-09-949-016-7379  
; Sequence 7379, Application US/09949016  
; Patent No. 6812339  
; GENERAL INFORMATION:  
; APPLICANT: VENTER, J. Craig et al.  
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED  
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF  
; FILE REFERENCE: CLO01307  
; CURRENT APPLICATION NUMBER: US/09/949,016  
; CURRENT FILING DATE: 2000-04-14  
; PRIOR APPLICATION NUMBER: 60/241,755  
; PRIOR FILING DATE: 2000-10-20  
; PRIOR APPLICATION NUMBER: 60/237,768  
; PRIOR FILING DATE: 2000-10-03  
; PRIOR APPLICATION NUMBER: 60/231,498  
; PRIOR FILING DATE: 2000-09-08  
; NUMBER OF SEQ ID NOS: 207012  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 7379  
; LENGTH: 835  
; TYPE: PRT  
; ORGANISM: Human  
US-09-949-016-7379

Query Match 11.2%; Score 69.5; DB 4; Length 835;  
Best Local Similarity 25.9%; Pred. No. 10;  
Matches 38; Conservative 14; Mismatches 44; Indels 51; Gaps 8;

QY 9 SLLILG-----MLWLDLAMAGSSP-----LSPEH--QRVQVR----- 38  
DB 71 SIILGATGDIACKYIMQGLFQLYLDAGRGHSFPGALITAPKQQLMAKALBSLSC 130

QY 39 -----PPHKAHVVPALPLSNQCLDEQQRHLWASVFSQSTKDSGSDLTVSQRTWGLRV 92  
DB 131 PKDWAPSHCAEH-----KDQFLQSLQYRQLKTAEDYQALNDIDBAQLQHA-----GLRE 179

QY 93 LNRLLF-----PSSRERSRSHQPSGSP 115  
DB 180 AGRIFYSPVPFAYEDIARNINSSCRP 206

Wed Jul 27 09:47:28 2005

us-10-659-782b-32.ra1

Page 6

Search completed: July 26, 2005, 14:39:05  
Job time : 43 secs

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OM protein - protein search, using sw model

Run on: July 26, 2005, 14:29:30 ; Search time 155 Seconds

(without alignments)  
293.626 Million cell updates/sec

Title: US-10-659-782B-32

Perfect score: 620

Sequence: 1 MPSPGTVCSLLILGMLMDL.....PPSSRRSRSHQSPCL 117

Scoring table:

BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1741741 seqs, 38892284 residues

Total number of hits satisfying chosen parameters: 1741741

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%  
Listing first 45 summaries

Database :

Published Applications AA:\*  
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2: /cgn2\_6/ptodata/2/pubpaa/PCT\_NEW\_PUB.pep.\*  
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11: /cgn2\_6/ptodata/2/pubpaa/US09C\_PUBCOMB.pep.\*  
12: /cgn2\_6/ptodata/2/pubpaa/US09\_NEW\_PUB.pep.\*  
13: /cgn2\_6/ptodata/2/pubpaa/US10\_PUBCOMB.pep.\*  
14: /cgn2\_6/ptodata/2/pubpaa/US10B\_PUBCOMB.pep.\*  
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18: /cgn2\_6/ptodata/2/pubpaa/US10\_NEW\_PUB.pep.\*  
19: /cgn2\_6/ptodata/2/pubpaa/US11A\_PUBCOMB.pep.\*  
20: /cgn2\_6/ptodata/2/pubpaa/US11\_NEW\_PUB.pep.\*  
21: /cgn2\_6/ptodata/2/pubpaa/US60\_NEW\_PUB.pep.\*  
22: /cgn2\_6/ptodata/2/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	605.5	97.7	116	17	US-10-659-782A-32
2	198	31.9	60	15	US-10-294-191A-3
3	198	31.9	91	16	US-10-477-506-2
4	198	31.9	117	9	US-09-794-987-2
5	198	31.9	117	9	US-09-853-253-2
6	198	31.9	117	9	US-09-988-722-268
7	198	31.9	117	9	US-09-988-723-268
8	198	31.9	117	9	US-09-989-279-268
9	198	31.9	117	9	US-09-989-727-268
10	198	31.9	117	9	US-09-989-731-268
11	198	31.9	117	9	US-09-989-732-268

	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45																																																																																																																									
	198	31.9	117	9	US-09-991-073-268	198	31.9	117	9	US-09-990-442-268	198	31.9	117	9	US-09-991-163-268	198	31.9	117	9	US-09-993-604-268	198	31.9	117	9	US-09-990-456-268	198	31.9	117	9	US-09-989-721-268	198	31.9	117	9	US-09-992-598-268	198	31.9	117	9	US-09-989-293A-268	198	31.9	117	9	US-09-989-735-268	198	31.9	117	9	US-09-990-444-268	198	31.9	117	9	US-09-991-181-268	198	31.9	117	9	US-09-989-730-268	198	31.9	117	9	US-09-990-436-268	198	31.9	117	9	US-09-993-687-268	198	31.9	117	10	US-09-989-734-268	198	31.9	117	10	US-09-997-653-268	198	31.9	117	10	US-09-989-724-268	198	31.9	117	10	US-09-989-728-268	198	31.9	117	10	US-09-990-562-268	198	31.9	117	10	US-09-990-441-268	198	31.9	117	10	US-09-993-667-268	198	31.9	117	10	US-09-997-428-268	198	31.9	117	10	US-09-997-666-268	198	31.9	117	10	US-09-990-438-268	198	31.9	117	10	US-09-991-157-268	198	31.9	117	10	US-09-991-157-268	198	31.9	117	10	US-09-997-514-268	198	31.9	117	10	US-09-997-514-268	198	31.9	117	10	US-09-991-172-268	198	31.9	117	10	US-09-990-726-268	198	31.9	117	10	US-09-997-559-268

#### ALIGNMENTS

RESULT 1  
US-10-659-782A-32  
Sequence 32, Application US/10659782A  
Publication No. US20050059015A1  
GENERAL INFORMATION:  
APPLICANT: Mintz, Liat  
TITLE OF INVENTION: Compositions, Reagents and Kits for and Methods of Diagnosing,  
FILE REFERENCE: 28238  
CURRENT APPLICATION NUMBER: US/10/659,782A  
CURRENT FILING DATE: 2003-09-11  
NUMBER OF SEQ ID NOS: 42  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 32  
LENGTH: 116  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-659-782A-32

Query Match 97.7%; Score 605.5; DB 17; Length 116;  
Best Local Similarity 99.1%; Pred. No. 9,9e-58;  
Matches 116; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 MPSPGTVCSLLILGMLMDLAAAGSFLSPHQRVQVPPHKAHPVVPALPLSNQCLDL 60  
DB 1 MPSPGTVCSLLILGMLMDLAAAGSFLSPHQRVQVPPHKAHPVVPALPLSNQCLDL 60

QY 61 QQRHMASVPSQSTKSGSDLTIVSGRTWGLKVLNRLFPSSRRSRSHQSPCL 117  
DB 61 QQRHMASVPSQSTKSGSDLTIVSGRTWGLKVLNRLFPSSRRSRSHQSPCL 116

RESULT 2  
US-10-294-191A-3

; Sequence 3, Application US/10294191A  
; Publication No. US20030211512A1  
; GENERAL INFORMATION:  
; APPLICANT: Rothschild, Max F.  
; APPLICANT: Kim, Kwan Suk  
; APPLICANT: Anderson, Lloyd L.  
; TITLE OF INVENTION: Novel Ghrelin Alleles and Use of the Same for Genetically Typing  
; FILE REFERENCE: P05408U01  
; CURRENT APPLICATION NUMBER: US/10/294,191A  
; CURRENT FILING DATE: 2002-11-14  
; PRIOR APPLICATION NUMBER: US 60/333,222  
; PRIOR FILING DATE: 2001-11-14  
; NUMBER OF SEQ ID NOS: 16  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO: 3  
; LENGTH: 60  
; TYPE: PRT  
; ORGANISM: Human  
US-10-294-191A-3

Query Match 31.9%; Score 198; DB 15; Length 60;  
Best Local Similarity 88.6%; Pred. No. 8.4e-14;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 MPSPGTVCSTLLIGLMTLMDLWAGSSFLSPHQRVQVPPHKA 44  
DB 1 MPSPGTVCSTLLIGLMTLMDLWAGSSFLSPHQRVQVPPHKA 44

RESULT 3  
US-10-477-506-2  
; Sequence 2, Application US/10477506  
; Publication No. US20040157227A1  
; GENERAL INFORMATION:  
; APPLICANT: Chopin, Lisa K  
; APPLICANT: Jeffery, Penelope L  
; APPLICANT: Herington, Adrian C  
; TITLE OF INVENTION: REPRODUCTIVE CANCER DIAGNOSIS AND THERAPY  
; FILE REFERENCE: 225181  
; CURRENT APPLICATION NUMBER: US/10/477,506  
; CURRENT FILING DATE: 2003-11-10  
; PRIOR APPLICATION NUMBER: PR3567  
; PRIOR FILING DATE: 2001-12-17  
; PRIOR APPLICATION NUMBER: PR4919  
; PRIOR FILING DATE: 2001-05-10  
; PRIOR APPLICATION NUMBER: PCT/AU02/000582  
; PRIOR FILING DATE: 2002-05-10  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO: 2  
; LENGTH: 91  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-477-506-2

Query Match 31.9%; Score 198; DB 16; Length 91;  
Best Local Similarity 88.6%; Pred. No. 1.4e-13;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 MPSPGTVCSTLLIGLMTLMDLWAGSSFLSPHQRVQVPPHKA 44  
DB 1 MPSPGTVCSTLLIGLMTLMDLWAGSSFLSPHQRVQVPPHKA 44

RESULT 4  
US-09-794-987-2  
; Sequence 2, Application US/09794987  
; Patent No. US20010041791A1  
; GENERAL INFORMATION:  
; APPLICANT: Sheppard, Paul O.  
; APPLICANT: Deisher, Theresa A.  
; TITLE OF INVENTION: MOTILIN HOMOLOGS  
; NUMBER OF SEQUENCES: 7

; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: ZymoGenetics, Inc.  
; STREET: 1201 Eastlake Avenue East  
; CITY: Seattle  
; STATE: WA  
; COUNTRY: USA  
; ZIP: 98102  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/794,987  
; FILING DATE: 27-Feb-2001  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 09/046,479  
; FILING DATE: <Unknown>  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Sawislak, Deborah A  
; REGISTRATION NUMBER: 37,438  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 206-442-6672  
; TELEFAX: 206-442-6678  
; TELEX: <Unknown>  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 117 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; FRAGMENT TYPE: Internal  
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:  
US-09-794-987-2

Query Match 31.9%; Score 198; DB 9; Length 117;  
Best Local Similarity 88.6%; Pred. No. 1.9e-13;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

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DB 1 MPSPGTVCSTLLIGLMTLMDLWAGSSFLSPHQRVQVPPHKA 44

RESULT 5  
US-09-853-253-2  
; Sequence 2, Application US/09853253  
; Patent No. US20020055156A1  
; GENERAL INFORMATION:  
; APPLICANT: JASPER, STEPHEN  
; APPLICANT: SHEPPARD, PAUL  
; APPLICANT: DEISHER, THERESA  
; APPLICANT: BISHOP, PAUL  
; TITLE OF INVENTION: Zs1g33-like Peptides  
; FILE REFERENCE: 00-30  
; CURRENT APPLICATION NUMBER: US/09/853,253  
; CURRENT FILING DATE: 2001-05-10  
; PRIOR APPLICATION NUMBER: 60/203,300  
; PRIOR FILING DATE: 2000-05-11  
; NUMBER OF SEQ ID NOS: 28  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO: 2  
; LENGTH: 117  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-853-253-2

Query Match 31.9%; Score 198; DB 9; Length 117;  
Best Local Similarity 88.6%; Pred. No. 1.9e-13;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;



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Db 1 MPSPGVCSLLILGMLMTDLNAGSSFLSPFHQVQVRPPKAP 44

RESULT 6  
US-09-989-722-268  
Sequence 268: Application US/09989722  
Patent No. US20020072067A1  
GENERAL INFORMATION:  
APPLICANT: Ashkenazi, Avi J.  
APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David  
APPLICANT: Deans, Luc  
APPLICANT: Eaton, Dan L.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Fong, Sherman  
APPLICANT: Gerber, Hanspeter  
APPLICANT: Gottlieb, Mary E.  
APPLICANT: Goddard, Audrey  
APPLICANT: Grimaldi, Paul J.  
APPLICANT: Guzman, Christopher  
APPLICANT: Guzman, Austin J.  
APPLICANT: Kjaer, Ivar J.  
APPLICANT: Napier, Mary A.  
APPLICANT: Pan, James  
APPLICANT: Paoli, Nicholas F.  
APPLICANT: Roy, Margaret Ann  
APPLICANT: Stewart, Timothy A.  
APPLICANT: Tamas, Daniel  
APPLICANT: Watanabe, Colin K.  
APPLICANT: Williams, P. Mickey  
APPLICANT: Wood, William I.  
APPLICANT: Zhang, Zemin  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
FILE REFERENCE: P2730P1C63  
CURRENT APPLICATION NUMBER: US/09/989,722  
CURRENT FILING DATE: 2001-11-19  
PRIOR APPLICATION NUMBER: 60/049787  
PRIOR FILING DATE: 1997-06-16  
PRIOR APPLICATION NUMBER: 60/062250  
PRIOR FILING DATE: 1997-10-17  
PRIOR APPLICATION NUMBER: 60/065186  
PRIOR FILING DATE: 1997-11-12  
PRIOR APPLICATION NUMBER: 60/065311  
PRIOR FILING DATE: 1997-11-13  
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PRIOR FILING DATE: 1997-11-24  
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PRIOR FILING DATE: 1998-06-22  
PRIOR APPLICATION NUMBER: 60/090349  
PRIOR FILING DATE: 1998-06-23  
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PRIOR FILING DATE: 1998-06-23  
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PRIOR APPLICATION NUMBER: 60/091626  
PRIOR FILING DATE: 1998-07-02  
PRIOR APPLICATION NUMBER: 60/091633  
PRIOR FILING DATE: 1998-07-02  
PRIOR APPLICATION NUMBER: 60/091978  
PRIOR FILING DATE: 1998-07-07  
PRIOR APPLICATION NUMBER: 60/091982  
PRIOR FILING DATE: 1998-07-07  
PRIOR APPLICATION NUMBER: 60/092182  
PRIOR FILING DATE: 1998-07-09

Query Match 31.9%; Score 198; DB 9; Length 117;  
Best Local Similarity 88.6%; Pred. No. 1,9e-13;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Cy 1 MSPGTVCSTLLIGLMTDLMAAGSSFLSPKHRYQVPPHKA 44  
Db 1 MSPGTVCSTLLIGLMTDLMAAGSSFLSPKHRYQVPPHKA 44

RESULT 7

US-09-989-723-268  
Sequence 268, Application US/09989723  
Patent No. US20020072092A1  
GENERAL INFORMATION:  
APPLICANT: Ashkenazi, Avi J.  
APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David  
APPLICANT: Desnoyers, Luc  
APPLICANT: Eaton, Dan L.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Fong, Sherman  
APPLICANT: Gerber, Hanspeter  
APPLICANT: Gerltsen, Mary E.  
APPLICANT: Goddard, Audrey  
APPLICANT: Godowski, Paul J.  
APPLICANT: Grimaldi, J. Christopher  
APPLICANT: Gunney, Austin L.  
APPLICANT: Kijavini, Ivar J.  
APPLICANT: Napier, Mary A.  
APPLICANT: Pan, James  
APPLICANT: Paoni, Nicholas P.  
APPLICANT: Roy, Margaret Ann  
APPLICANT: Stewart, Timothy A.  
APPLICANT: Tumas, Daniel  
APPLICANT: Watanabe, Colin K.  
APPLICANT: Williams, P. Mickey  
APPLICANT: Wood, William I.  
APPLICANT: Zhang, Zemin  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
FILE REFERENCE: P2730P1C62  
CURRENT APPLICATION NUMBER: US/09/989,723  
CURRENT FILING DATE: 2001-11-19  
PRIOR APPLICATION NUMBER: 60/049787  
PRIOR FILING DATE: 1997-06-16  
PRIOR APPLICATION NUMBER: 60/062250  
PRIOR FILING DATE: 1997-10-17  
PRIOR APPLICATION NUMBER: 60/065186  
PRIOR FILING DATE: 1997-11-12  
PRIOR APPLICATION NUMBER: 60/065311  
PRIOR FILING DATE: 1997-11-13  
PRIOR APPLICATION NUMBER: 60/066770  
PRIOR FILING DATE: 1997-11-24  
PRIOR APPLICATION NUMBER: 60/075945  
PRIOR FILING DATE: 1998-02-25  
PRIOR APPLICATION NUMBER: 60/078910  
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PRIOR APPLICATION NUMBER: 60/092182  
PRIOR FILING DATE: 1998-07-09

Query Match 31.9%; Score 198; DB 9; Length 117;  
Best Local Similarity 88.6%; Pred. No. 1.3e-13;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Cy 1 MSPGTCSTLLGMLWLDLMMGSSFLSPHQRVOVRPHKAP 44  
Db 1 MSPGTCSTLLGMLWLDLMMGSSFLSPHQRVOVRKESKAP 44

RESULT 8  
US-09-989-279-268  
Sequence 268 Application us/09389279  
Patent No. US20020072496A1  
GENERAL INFORMATION:  
APPLICANT: Ashkenazi, Avi J.  
APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David

APPLICANT: Deenoeyers, Luc  
APPLICANT: Batron, Dan L.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Fong, Sherman  
APPLICANT: Gerber, Hanspeter  
APPLICANT: Gerritsen, Mary E.  
APPLICANT: Goddard, Audrey  
APPLICANT: Godowski, Paul J.  
APPLICANT: Grimaldi, J. Christopher  
APPLICANT: Gurney, Austin L.  
APPLICANT: Kljavin, Ivar J.  
APPLICANT: Napier, Mary A.  
APPLICANT: Pan, James  
APPLICANT: Paoni, Nicholas F.  
APPLICANT: Roy, Margaret Ann  
APPLICANT: Stewart, Timothy A.  
APPLICANT: Tumas, Daniel  
APPLICANT: Watanabe, Colin K.  
APPLICANT: Williams, P. Mickey  
APPLICANT: Wood, William I.  
APPLICANT: Zhang, Zemin  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
TITLE OF INVENTION: Acids Encoding the Same  
FILE REFERENCE: P2730P1C36  
CURRENT APPLICATION NUMBER: US/09/989, 279  
CURRENT FILING DATE: 2001-11-19  
PRIOR APPLICATION NUMBER: 60/049787  
PRIOR FILING DATE: 1997-06-16  
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Query Match 31.9%; Score 198; DB 9; Length 117;  
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RESULT 9  
US-09-989-727-268  
Sequence 268, Application US/09989727  
Patent No. US20020072497A1  
GENERAL INFORMATION:  
;; APPLICANT: Ashkenazi, Avi J.  
;; APPLICANT: Baker, Kevin P.  
;; APPLICANT: Botstein, David  
;; APPLICANT: Desnoyers, Luc  
;; APPLICANT: Eacon, Dan L.  
;; APPLICANT: Ferrara, Napoleone  
;; APPLICANT: Fong, Sherman  
;; APPLICANT: Gerber, Hanspeter  
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;; APPLICANT: Goddard, Audrey

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;; APPLICANT: Watanabe, Colin K.  
;; APPLICANT: Williams, P. Mickey  
;; APPLICANT: Wood, William I.  
;; APPLICANT: Zhang, Zemin  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
FILE REFERENCE: P2730PIC65  
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;; PRIOR FILING DATE: 1998-07-07  
;; PRIOR APPLICATION NUMBER: 60/092182  
;; PRIOR FILING DATE: 1998-07-09

Query Match 31.9%; Score 198; DB 9; Length 117;  
Best Local Similarity 88.6%; Pred. No. 1,9e-13;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1 MPSPGTVCSLLLGMLMDLMDAGSSFTLSPHQRVQRPHPKAP 44  
Db 1 MPSPGTVCSLLLGMLMDLMDAGSSFTLSPHQRVQRPKESKRP 44

RESULT 10  
US-09-989-731-268  
; Sequence 268; Application US/09989731  
; Patent No. US20020103125A1  
; GENERAL INFORMATION:  
; APPLICANT: Ashkenazi, Avi J.  
; APPLICANT: Baker, Kevin P.  
; APPLICANT: Botstein, David  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Eaton, Dan L.  
; APPLICANT: Ferrara, Napoleone  
; APPLICANT: Fong, Sherman  
; APPLICANT: Gerber, Hanspeter  
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; APPLICANT: Goddard, Audrey  
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APPLICANT: Williams, P. Mickey  
APPLICANT: Wood, William I.  
APPLICANT: Zhang, Zemin  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
FILE OF INVENTION: Acids Encoding the Same  
FILE REFERENCE: P2730P1C70  
CURRENT FILING DATE: 2001-11-20  
PRIOR APPLICATION NUMBER: 60/049787  
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; PRIOR APPLICATION NUMBER: 60/091982
; PRIOR FILING DATE: 1998-07-07
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; PRIOR FILING DATE: 1998-07-09
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Query Match 31.9%; Score 198; DB 9; Length 117;
Best Local Similarity 88.6%; Pred. No. 1,9e-13;
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
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## RESULT 11

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; Sequence 268, Application US/09989732
; Patent No. US20020123463A1
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## GENERAL INFORMATION:

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; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Deenoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerriksen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
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; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2710P1C57
; CURRENT APPLICATION NUMBER: US/09/989, 732
; CURRENT FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: 60/049787
; PRIOR FILING DATE: 1997-06-16
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/065186
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PRIOR FILING DATE: 1998-07-09

Query Match 31.9%; Score 198; DB 9; Length 117;  
Best Local Similarity 88.6%; Pred. No. 1,9e-13;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1 MSPRTVCSLLILGMLDLAMGSSFLSPHQRVQRPHPKAP 44  
Db 1 MSPRTVCSLLILGMLDLAMGSSFLSPHQRVQRPHPKAP 44

RESULT 12  
US-09-991-073-268  
Sequence 268, Application US/09991073  
Patent No. US20020127576A1  
GENERAL INFORMATION:  
APPLICANT: Ashkenazi, Avi J.  
APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David  
APPLICANT: Desnoves, Luc  
APPLICANT: Eaton, Dan L.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Fong, Sherman  
APPLICANT: Gerber, Hanspeter  
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APPLICANT: Godowski, Paul J.  
APPLICANT: Grimaldi, J. Christopher  
APPLICANT: Gurney, Austin L.  
APPLICANT: Kijavini, Ivar J.  
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APPLICANT: Roy, Margaret Ann  
APPLICANT: Stewart, Timothy A.  
APPLICANT: Tumas, Daniel  
APPLICANT: Watanabe, Colin K.  
APPLICANT: Williams, P. Mickey  
APPLICANT: Wood, William I.  
APPLICANT: Zhang, Zemin

TITLE OF INVENTION: Acids Encoding the Same  
TITLE OR INVENTION: Acids Encoding the Same  
FILE REFERENCE: P2730P1C5  
CURRENT APPLICATION NUMBER: US/09/991,073  
CURRENT FILING DATE: 2001-11-14  
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;; PRIOR FILING DATE: 1998-07-09

Query Match 31.9%; Score 198; DB 9; Length 117;  
Best Local Similarity 88.6%; Pred. No. 1.9e-13;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Cy 1 MPSPGTVCSLILGLMTLMDLMAAGSSFLSPHORVQVPRPHKAP 44  
Db 1 MPSPGTVCSLILGLMTLMDLMAAGSSFLSPHORVQVPRPHKAP 44

## RESULT 13

US-09-990-442-268

;; Sequence 268 Application US/09990442  
;; Patent No. US20020132252A1

## GENERAL INFORMATION:

;; APPLICANT: Ashkenazi, Avi J.  
;; APPLICANT: Baker, Kevin P.  
;; APPLICANT: Botstein, David  
;; APPLICANT: Deenoyers, Luc  
;; APPLICANT: Eaton, Dan L.  
;; APPLICANT: Ferrara, Napoleone  
;; APPLICANT: Fong, Sherman  
;; APPLICANT: Gerber, Hanspeter  
;; APPLICANT: Gerritsen, Mary E.  
;; APPLICANT: Goddard, Audrey J.  
;; APPLICANT: Grimaldi, J. Christopher  
;; APPLICANT: Gutney, Austin L.  
;; APPLICANT: Kijavlin, Ivar J.  
;; APPLICANT: Napier, Mary A.  
;; APPLICANT: Pan, James  
;; APPLICANT: Paoni, Nicholas F.  
;; APPLICANT: Roy, Margaret Ann  
;; APPLICANT: Stewart, Timothy A.  
;; APPLICANT: Tumas, Daniel  
;; APPLICANT: Watanabe, Colin K.  
;; APPLICANT: Williams, P. Mickey  
;; APPLICANT: Wood, William I.  
;; APPLICANT: Zhang, Zemin  
;; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
;; FILE REFERENCE: P2730P1C8  
;; CURRENT APPLICATION NUMBER: US/09/990,442  
;; CURRENT FILING DATE: 2001-11-14  
;; PRIOR APPLICATION NUMBER: 60/049787  
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;; PRIOR FILING DATE: 1998-07-07  
;; PRIOR APPLICATION NUMBER: 60/092182  
;; PRIOR FILING DATE: 1998-07-09

Query Match 31.9%; Score 198; DB 9; Length 117;  
Best Local Similarity 88.6%; Pred. No. 1.9e-13;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1 MPSPGVCSLLILGLMLDLAMAGSSFLSPHQRVQVPPHKAP 44  
Db 1 MPSPGVCSLLILGLMLDLAMAGSSFLSPHQRVQVPPHKAP 44

RESULT 14  
US-09-991-163-268  
Sequence 268, Application US/09991163  
Patent No. US20020132253A1  
GENERAL INFORMATION:  
APPLICANT: Ashkenazi, Avi J.  
APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David  
APPLICANT: Desnoves, Luc  
APPLICANT: Eaton, Dan L.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Fong, Sherman  
APPLICANT: Gerber, Hanspeter  
APPLICANT: Gerlitsen, Mary E.  
APPLICANT: Goddard, Audrey  
APPLICANT: Godowski, Paul J.  
APPLICANT: Grimaldi, J. Christopher  
APPLICANT: Gunney, Austin L.  
APPLICANT: Kijavlin, Ivar J.  
APPLICANT: Napier, Mary A.  
APPLICANT: Pan, James  
APPLICANT: Paoni, Nicholas F.  
APPLICANT: Stewart, Timothy A.  
APPLICANT: Tamas, Daniel  
APPLICANT: Watanabe, Colin K.  
APPLICANT: Williams, P. Mickey  
APPLICANT: Wood, William I.  
APPLICANT: Zhang, Zemin

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
FILE REFERENCE: P2730PIC17  
CURRENT APPLICATION NUMBER: US/09/991,163  
CURRENT FILING DATE: 2001-11-14  
PRIOR APPLICATION NUMBER: 60/049787  
PRIOR FILING DATE: 1997-06-16  
PRIOR APPLICATION NUMBER: 60/062250  
PRIOR FILING DATE: 1997-10-17  
PRIOR APPLICATION NUMBER: 60/065186  
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PRIOR FILING DATE: 1998-02-25  
PRIOR APPLICATION NUMBER: 60/078910  
PRIOR FILING DATE: 1998-03-20  
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Query Match 31.9% Score 198; DB 9; Length 117;  
Best Local Similarity 88.6% Pred. No. 1.9e-13;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1 MPSPGVCSLLILGLMTWDLAMAGSSFLSPHQRVQVPPHKA 44  
Db 1 MPSPGVCSLLILGLMTWDLAMAGSSFLSPHQRVQVPPHKA 44

RESULT 15  
US-09-993-604-268  
Sequence 268, Application US/09993604  
Patent No. US20020137075A1  
GENERAL INFORMATION:  
APPLICANT: Ashkenazi, Avi J.  
APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David  
APPLICANT: Desnoyers, Luc  
APPLICANT: Eaton, Dan L.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Fong, Sherman  
APPLICANT: Gerber, Hanspeter  
APPLICANT: Gerlitsen, Mary E.  
APPLICANT: Goddard, Audrey  
APPLICANT: Grimaldi, J. Christopher  
APPLICANT: Gutney, Austin L.  
APPLICANT: Kljavin, Ivar J.  
APPLICANT: Napier, Mary A.  
APPLICANT: Pan, James  
APPLICANT: Paoni, Nicholas F.  
APPLICANT: Roy, Margaret Ann  
APPLICANT: Stewart, Timothy A.  
APPLICANT: Tumas, Daniel  
APPLICANT: Watanabe, Colin K.  
APPLICANT: Williams, P. Mickey  
APPLICANT: Wood, William I.  
APPLICANT: Zhang, Zemin  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
TITLE OF INVENTION: Acids Encoding the Same  
FILE REFERENCE: P2730P1C25  
CURRENT APPLICATION NUMBER: US/09/993,604  
CURRENT FILING DATE: 2001-11-14  
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;; PRIOR APPLICATION NUMBER: 60/091978  
;; PRIOR FILING DATE: 1998-07-07  
;; PRIOR APPLICATION NUMBER: 60/091982  
;; PRIOR FILING DATE: 1998-07-07  
;; PRIOR APPLICATION NUMBER: 60/092182  
;; PRIOR FILING DATE: 1998-07-09

Query Match 31.9%; Score 198; DB 9; Length 117;  
Best Local Similarity 88.6%; Pred. No. 1,9e-13;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
Oy 1 MSPGTVCSLLILGMLWIDLAMAGSSFLSPHQRVQVRPPKAP 44  
Db 1 MSPGTVCSLLILGMLWIDLAMAGSSFLSPHQRVQVRPPKAP 44

Search completed: July 26, 2005, 14:42:56  
Job time : 157 secs

mis Page Blank (uspto)



GenCore version 5.1.6  
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# OM protein - protein search, using sw model

Run on: July 26, 2005, 14:11:02 ; Search time 174 Seconds  
(without alignments)  
260.063 Million cell updates/sec

Title: US-10-659-782B-32

Perfect score: 620  
Sequence: 1 MPSTGTCVSLLLGMLWLDL.....PPSRERSRRSHQSCSPDL 117

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

## Database :

A Geneseq\_16Dec04:\*  
1: geneseqp1980s:\*  
2: geneseqp1990s:\*  
3: geneseqp2000s:\*  
4: geneseqp2001s:\*  
5: geneseqp2002s:\*  
6: geneseqp2003as:\*  
7: geneseqp2003bs:\*  
8: geneseqp2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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3	198	31.9	117	2	AAW87991 Protein d
4	198	31.9	117	3	AAV87236 Human sig
5	198	31.9	117	4	AA20101 Zs1933 pr
6	198	31.9	117	4	AA62649 Human zsl
7	198	31.9	117	4	AA38890 Human pol
8	198	31.9	117	4	AA65011 Human ghr
9	198	31.9	117	5	AB78319 Amino aci
10	198	31.9	117	5	AAE23838 Human zsl
11	198	31.9	117	5	AAE15883 Human zsl
12	198	31.9	117	6	ABU58046 Human PRO
13	198	31.9	117	6	ABU59124 Novel hum
14	198	31.9	117	6	ABU82636 Human sec
15	198	31.9	117	6	ABO17836 Human sec
16	198	31.9	117	6	ABU60555 Human hum
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19	198	31.9	117	6	ABU72522 Novel hum
20	198	31.9	117	6	ABU66790 Human PRO
21	198	31.9	117	6	ABU59871 Novel sec
22	198	31.9	117	6	ABU59271 Human sec
23	198	31.9	117	6	ABO25968 Human PRO
24	198	31.9	117	6	ABO25061 Human sec
25	198	31.9	117	6	ABU58977 Human sec

## ALIGNMENTS

RESULT 1  
ID ADK6754 standard; protein; 60 AA.  
XX  
AC ADK6754;  
XX  
DT 06-MAY-2004 (first entry)  
XX  
DE Human ghrelin protein #1.  
XX  
KW Growth; appetite; fatness; genotype; polymorphism; ghrelin protein;  
KM breeding; human.  
XX  
OS Homo sapiens.  
XX  
PN US2003211512-A1.  
XX  
PD 13-NOV-2003.  
XX  
PF 14-NOV-2002; 2002US-00294191.  
XX  
PR 14-NOV-2001; 2001US-0333222P.  
XX  
PA (ROTH/) ROTHSCILD M F.  
PA (KIMK/) KIM K.  
PA (ANDE/) ANDERSON L L.  
XX  
PI Rothechild MF, Kim K, Anderson LL;  
XX WPI; 2004-010667/01.  
XX  
PS Disclosure; SEQ ID NO 3; 24pp; English.  
XX  
XX The present invention relates to a method of screening animals to  
XX determine those more likely to produce desired growth, appetite and  
XX fatness which involves obtaining a sample of genetic material from the  
XX animal and assaying for the presence of a genotype in the animal which is  
XX associated with favourable growth, appetite and fatness; the genotype  
XX characterised by a polymorphism in the ghrelin gene. The composition and  
XX methods are useful in screening animals (i.e. pigs) to determine those  
XX more or less likely to produce desired growth, appetite and fatness to  
XX optimise breeding and selection techniques. The present sequence is human  
XX ghrelin protein of the invention.

XX Sequence 60 AA;  
SQ

Query Match 31.9%; Score 198; DB 8; Length 60;  
Best Local Similarity 88.6%; Pred. No. 1e-14;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Oy 1 MSPGTVCSLLILGLMLDLAMAGSSFLSPHQRVQVRPPHKAP 44  
Db 1 MSPGTVCSLLILGLMLDLAMAGSSFLSPHQRVQVRPPHKAP 44

RESULT 2

AAE33410  
ID AAE33410 standard; protein; 91 AA.

XX AAE33410;

XX 02-APR-2003 (first entry)

XX Human exon 3-deleted ghrelin protein.

XX Ghrelin; preproghrelin; GHS-R 1b; benign prostatic hyperplasia; therapy;  
XX breast; cervical; uterine; choriocarcinoma; prostate; ovary; cytosol; cancer; human.

XX Homo sapiens.

XX MO200290387-A1.

XX 14-NOV-2002.

XX 10-MAY-2002; 2002MO-AU000582.

XX 10-MAY-2001; 2001AU-00004919.

XX 17-DEC-2001; 2001AU-00009567.

XX (UYQU-) UNIV QUEENSLAND TECHNOLOGY.

XX PI Chopin LK, Jeffery PL, Herington AC;

XX WPI; 2003-111957/10.

XX DR N-PSDB; AAD50726.

XX PT Identifying a cancer cell or tissue for treating prostate, ovarian,  
PT breast cancer, or benign prostatic hyperplasia, by detecting the  
PT expression of a ghrelin, an exon-3 deleted preproghrelin and/or a GHS-R  
PT 1b proteins or nucleic acids.

XX PS Claim 14; Page 34; 50pp; English.

XX The invention relates to a method for identifying a cancer cell or tissue  
CC of the reproductive system by detecting expression of a ghrelin, an exon-  
CC 3 deleted preproghrelin and/or a GHS-R 1b proteins or nucleic acids. The  
CC antibodies, exon 3-deleted form of preproghrelin and antagonists are  
CC useful for treating cancer of the reproductive system such as prostate,  
CC ovarian, breast, cervical or uterine cancer, choriocarcinoma or benign  
CC prostatic hyperplasia. The present sequence is human exon 3-deleted  
CC ghrelin protein

XX Sequence 91 AA;

Query Match 31.9%; Score 198; DB 6; Length 91;  
Best Local Similarity 88.6%; Pred. No. 1.8e-14;

Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Oy 1 MSPGTVCSLLILGLMLDLAMAGSSFLSPHQRVQVRPPHKAP 44  
Db 1 MSPGTVCSLLILGLMLDLAMAGSSFLSPHQRVQVRPPHKAP 44

RESULT 3  
AAW87991

ID AAW87991 standard; protein; 117 AA.

XX AAW87991;

XX 07-APR-1999 (first entry)

XX Protein designated zsig33.

XX Zsig33; gastric motility; gastrointestinal inflammation; reflux disease;  
XX nutrient absorption regulation; obesity; metabolic disorder.

XX Homo sapiens.

XX Key Location/Qualifiers

XX Peptide 1..23 /note="signal peptide"

XX Protein 24..117 /note="mature protein"

XX MO9842840-A1.

XX 01-OCT-1998.

XX 23-MAR-1998; 98WO-US005620.

XX 24-MAR-1997; 97US-0041102P.

XX 24-MAR-1997; 97US-00822897.

XX (ZYMO) ZYMOGENETICS INC.

XX Shepard PO, Delsher TA;

XX WPI; 1998-070071/06.

XX DR N-PSDB; AAX04550.

XX PT Human polypeptide having homology to motilin, zsig33 - useful e.g. to  
PT treat gastrointestinal motility disorders, obesity etc. and to identify  
PT antagonists to treat gastrointestinal hypermotility.

XX PS Claim 13; Page 55-56; 69pp; English.

XX The present sequence represents a protein designated Zsig33. The nucleic  
CC acids are strongly expressed in stomach tissue. The polypeptide (or  
CC allelic variants/orthologs) can be used to stimulate gastric motility,  
CC measured as increased transit time or gastric emptying of an ingested  
CC substance in mammals. The products are used to treat disorders associated  
CC with gastrointestinal cell contractility, secretion of digestive  
CC enzymes/acids, gastrointestinal motility, recruitment of digestive  
CC enzymes, gastrointestinal inflammation, reflux disease and nutrient  
CC absorption regulation. Zsig33 polypeptides may also be important  
CC neurologically, since the family of gut-brain peptides to which the  
CC homologous protein motilin belongs has been associated with neurological  
CC and CNS functions. They may therefore be used e.g. to regulate satiety or  
CC treat obesity and other metabolic disorders where neurological feedback  
CC modulates nutritional absorption. They are useful to identify zsig33  
CC agonists, antagonists and ligands and to produce antibodies

XX Sequence 117 AA;

Query Match 31.9%; Score 198; DB 2; Length 117;  
Best Local Similarity 88.6%; Pred. No. 2.4e-14;

Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Oy 1 MSPGTVCSLLILGLMLDLAMAGSSFLSPHQRVQVRPPHKAP 44  
Db 1 MSPGTVCSLLILGLMLDLAMAGSSFLSPHQRVQVRPPHKAP 44

RESULT 4

AAW87236

ID AAW87236 standard; protein; 117 AA.

XX AAW87236;

XX 11-MAY-2000 (first entry)  
DT Human signal peptide containing protein HSP-13 SEQ ID NO:13.  
XX  
DE Human; signal peptide-containing protein; HSP; diagnosis; cancer;  
XX inflammation; cardiovascular disease; anticancer; anti-inflammatory;  
XX antimicrobial; neuroprotective; cardiovascular; hepatotropic;  
XX antiasthmatic; gene therapy; cell proliferation; neurological disorder;  
XX reproductive disorder; developmental disorder; arteriosclerosis;  
XX cirrhosis; psoriasis; acquired immune deficiency syndrome; anaemia;  
XX asthma; Crohn's disease; infection; Alzheimer's disease; schizophrenia;  
XX Parkinson's disease; Huntington's disease; ovulatory defect;  
XX muscular dystrophy.  
XX  
OS Homo sapiens.  
XX  
PN WO200000610-A2.  
XX  
PD 06-JAN-2000.  
XX  
PF 25-JUN-1999; 99WO-US014484.  
XX  
PR 26-JUN-1998; 98US-0090762P.  
XX PR 31-JUL-1998; 98US-0094983P.  
XX PR 01-OCT-1998; 98US-0102686P.  
XX PR 11-DEC-1998; 98US-0112123P.  
XX  
PA (INCY-) INCYTE PHARM INC.  
XX  
PI Lal P, Tang YT, Gorgone GA, Corley NC, Guegler KJ, Baughn MR;  
PI Akerblom IE, Au-Young J, Yue H, Patterson C, Reddy R, Hillman JL;  
PI Bandman O;  
XX  
DR WPI: 2000-160673/14.  
XX N-PSDB; AAZ98121.  
XX  
PT New human signal peptide-containing proteins useful in treatment,  
PT prevention and diagnosis of e.g. cancer, inflammation and cardiovascular  
PT diseases.  
XX  
PS Claim 1; Page 168-169; 327PP; English.  
XX  
XX AAZ98109 to AAZ98242 encode AA87324 to AA87357 which represent the  
XX human signal peptide-containing proteins HSP-1 to HSP-134. HSPs have  
XX anticancer, anti-inflammatory, antimicrobial, neurotropic, hepatotropic,  
XX neuroprotective, cardiovascular and antiasthmatic activities, and can be  
XX used in gene therapy. HSPs can be used to treat or prevent disorders  
XX associated with decreased activity or function of HSP. Antagonists of  
XX HSP are used to treat or prevent disorders associated with increased  
XX activity or function of HSP. Such diseases include cell proliferation  
XX (including cancer), inflammation, cardiovascular, neurological,  
XX reproductive or developmental disorders, (e.g. arteriosclerosis,  
XX cirrhosis, psoriasis, acquired immune deficiency syndrome, anaemia,  
XX asthma, Crohn's disease, microbial or other infections, congestive or  
XX ischaemic heart disease, Alzheimer's, Parkinson's or Huntington's  
XX diseases, schizophrenia, ovulatory defects, muscular dystrophy). HSP  
XX nucleic acids can be used for the recombinant production of HSP, for  
XX detecting HSP in standard hybridisation and amplification assays (for  
XX diagnosis and monitoring), in gene therapy, as antisense, triplex-forming  
XX or ribozyme therapeutics, for detecting related sequences or genetic  
XX variations, and for chromosomal mapping. HSP are also used to raise  
XX specific antibodies (Ab) and to screen for agonists and antagonists  
XX (potential therapeutic agents). Ab are used to diagnose, or monitor, HSP  
XX -related diseases (in usual immunoassays), as therapeutic antagonists, in  
XX competitive drug screens, and for purification of HSP from natural  
XX sources  
XX  
SQ Sequence 117 AA;

QY 1 MSPBGTVCSTLLILGMLWLDLWAGSSFLSPHQRVQVRPPKAP 44  
Db 1 MSPBGTVCSTLLILGMLWLDLWAGSSFLSPHQRVQVRPPKAP 44  
RESULT 5  
ID AAB20101 standard; protein, 117 AA.  
XX  
XX AAB20101;  
XX  
XX 23-APR-2001 (first entry)  
XX  
XX Zs1g33 protein.  
XX  
XX SGIP; zs1g33; anorectic; antidiabetic; somatotropin; somatomedin-C;  
XX nutritional absorption modulator; growth hormone secretagogue; therapy;  
XX human.  
XX  
XX Homo sapiens.  
XX  
XX Key Location/Qualifiers  
XX FH Peptide 1..23  
XX FT /label= Signal\_peptide  
XX FT Protein 24..117  
XX FT /label= Mature\_protein  
XX FT Peptide 24..34  
XX FT /label= SGIP\_peptide  
XX FT /note= "this peptide is claimed in Claim 1"  
XX  
XX WO200100830-A1.  
XX  
XX 04-JAN-2001.  
XX  
XX 30-JUN-2000; 2000WO-US018306.  
XX  
XX 30-JUN-1999; 99US-00345157.  
XX  
XX (ZYMO) ZYMOGENETICS INC.  
XX  
XX Shepard PO, Jaspers SR, Delsner TA, Bishop PD;  
XX  
XX WPI: 2001-123010/13.  
XX N-PSDB; AAF30033.  
XX  
XX Novel variants of SGIP peptides for modulating contractility in duodenum  
XX PT or jejunum tissue, pancreatic secretion of hormones and digestive  
XX PT enzymes, inducing growth hormone secretion or modulating gastric  
XX emptying.  
XX  
XX Disclosure; 54; 61pp; English.  
XX  
XX The present sequence is that of zs1g33, a secreted protein with homology  
XX to moxilin (see AAB20102). Zs1g33 is expressed at high levels in the  
XX stomach, and at lower levels in the small intestine and pancreas. A novel  
XX peptide fragment of zs1g33, termed SGIP (see AAB20100), is claimed. SGIP  
XX is a ligand for growth hormone secretagogue receptor, and is therefore  
XX useful for modulating secretion of growth hormone and insulin like growth  
XX factor 1. SGIP, and variant SGIP peptides, are used in claimed methods  
XX for stimulating contractility in duodenum or jejunum tissue, modulating  
XX pancreatic secretion of hormones and digestive enzymes, inducing growth  
XX hormone secretion, and modulating gastric emptying  
XX  
SQ Sequence 117 AA;

Query Match 31.9%; Score 198; DB 4; Length 117;  
Best Local Similarity 88.6%; Pred. No. 2.4e-14;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 MSPBGTVCSTLLILGMLWLDLWAGSSFLSPHQRVQVRPPKAP 44  
Db 1 MSPBGTVCSTLLILGMLWLDLWAGSSFLSPHQRVQVRPPKAP 44



Query Match 31.9%; Score 198; DB 4; Length 117;  
 Best Local Similarity 88.6%; Pred. No. 2.4e-14;  
 Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 MSPGTVCSLLILGMLWDLAMAGSSFLSPHQRVQVRPPHKAP 44  
 DB 1 MSPGTVCSLLILGMLWDLAMAGSSFLSPHQRVQVRPPHKAP 44

RESULT 8  
 AAB60511

ID AAB60511 standard; protein; 117 AA.

AC AAB60511;

DT 24-APR-2001 (first entry)

DE Human ghrelin preproprotein, SEQ ID NO:5.

KM Growth hormone secretagogue; GHS; ghrelin; precursor; preproprotein;  
 growth hormone deficiency.

XX Homo sapiens.

OS MO200107475-A1.

PN 01-FEB-2001.

PD 24-JUL-2000; 2000MO-JP004907.

PE 23-JUL-1999; 99JP-00210002.

PR 29-NOV-1999; 99JP-00338841.

PR 26-APR-2000; 2000JP-00126623.

XX (KANG/) KANGAWA K.

PI Kangawa K, Kojima M, Hosoda H, Matsuo H, Minamitake Y;

DR WPI; 2001-159704/16.

DR N-PSDB; AAF59645.

PT New peptide compounds which induce growth hormone secretion and elevate  
 cell calcium concentrations, useful in treatment and diagnosis of infant  
 growth disorders.

PS Claim 3; Page 182; 210pp; Japanese.

XX The invention relates to a novel peptide compound or its salt which  
 induces the secretion of growth hormone and/or elevates calcium ion  
 concentration in cells. The peptides are ghrelin homologues and are  
 characterised in that at least one amino acid has been substituted by a  
 modified amino acid and/or a non-amino acid compound. The invention also  
 encompasses the unmodified peptides; the DNA encoding the peptides;  
 vectors and host cells comprising such DNA; a method of producing the  
 peptides comprising recombinant production, optionally followed by  
 chemical modification; an antibody specific for a peptide of the  
 invention; and an assay and kit for detecting the peptides. The peptides  
 of the invention are useful for treating and/or diagnosing diseases  
 caused by a deficiency in growth hormone expression or activity. In  
 particular, they are useful for promoting infant growth due to growth  
 hormone deficiency. The compounds of the invention are safe with no  
 accompanying side effects. The present sequence represents a ghrelin-type  
 growth hormone secretagogue (GHS) precursor protein of the invention

XX Sequence 117 AA;

Query Match 31.9%; Score 198; DB 4; Length 117;  
 Best Local Similarity 88.6%; Pred. No. 2.4e-14;  
 Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 MSPGTVCSLLILGMLWDLAMAGSSFLSPHQRVQVRPPHKAP 44  
 DB 1 MSPGTVCSLLILGMLWDLAMAGSSFLSPHQRVQVRPPHKAP 44

DB 1 MSPGTVCSLLILGMLWDLAMAGSSFLSPHQRVQVRPPHKAP 44

RESULT 9

ID AAB78319 standard; protein; 117 AA.

AC AAB78319;

DT 05-DEC-2002 (first entry)

DE Amino acid sequence of a human zsig33.

KM Short gastrointestinal peptide; SGIP; zsig33; motilin.

XX Homo sapiens.

OS US6420521-B1.

PN 16-JUL-2002.

PD 30-JUN-2000; 2000US-00608810.

PE 30-JUN-1999; 99US-0141592P.

PR (ZYMO ) ZYMOGENETICS INC.

PR Sheppard PO, Jaspers SR, Deisher TA, Bishop PD;

DR WPI; 2002-634794/68.

DR N-PSDB; ABV72214.

PT New Short Gastrointestinal Peptide, which has homology to motilin, useful  
 for preventing, diagnosing and treating gastrointestinal disorders.

PS Disclosure; Col 39-40; 23pp; English.

XX The present sequence represents human zsig33. The specification describes  
 a short gastrointestinal peptide (SGIP), which is derived from zsig33.  
 CC SGIP has homology to motilin. The SGIP peptide may be used in the  
 CC prevention, diagnosis and treatment of diseases associated with  
 CC inappropriate SGIP expression. For example, SGIP may be used to treat  
 CC disorders associated with decreased expression by rectifying mutations or  
 CC deletions in a patient's genome that affect the activity of SGIP by  
 CC expressing inactive proteins or to supplement the patient's own production  
 CC of SGIP. SGIP may also be used as an antigen in the production of  
 CC antibodies against SGIP and in assays to identify modulators of SGIP  
 CC expression and activity. The anti-SGIP antibodies, agonists and  
 CC antagonists may also be used to regulate expression and activity. The  
 CC anti-SGIP antibodies may also be used as diagnostic agents for detecting  
 the presence of SGIP in samples

XX Sequence 117 AA;

Query Match 31.9%; Score 198; DB 5; Length 117;  
 Best Local Similarity 88.6%; Pred. No. 2.4e-14;  
 Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 MSPGTVCSLLILGMLWDLAMAGSSFLSPHQRVQVRPPHKAP 44  
 DB 1 MSPGTVCSLLILGMLWDLAMAGSSFLSPHQRVQVRPPHKAP 44

RESULT 10  
 AAE23838  
 ID AAE23838 standard; protein; 117 AA.

AC AAE23838;  
 XX 10-SEP-2002 (first entry)  
 DT  
 XX Human zsig33 protein.  
 DE  
 XX Human; zsig33-like peptide; gastric contractility; nutrient uptake;  
 KW growth hormone; digestive enzyme; restorative therapy; gene therapy;  
 KW protein therapy; gastrointestinal; endocrine; anabolic.  
 KM  
 XX Homo sapiens.  
 OS  
 XX US2002055156-A1.  
 PN  
 XX 09-MAY-2002.  
 PD  
 XX 10-MAY-2001; 2001US-00853253.  
 PF  
 XX 11-MAY-2000; 2000US-0203300P.  
 PR  
 XX (JASP/) JASPER S R.  
 PA (SHEP/) SHEPPARD P O.  
 PA (DEIS/) DEISHER T A.  
 PA (BISH/) BISHOP P D.  
 XX  
 PI Jaepers SR, Sheppard PO, Deisher TA, Bishop PD;  
 DR WPI; 2002-443750/47.  
 DR N-PSDB; AAD38238.  
 XX  
 PT ZSIG33-like peptides and polynucleotides, useful for modulating gastric  
 PT contractility, nutrient uptake, growth hormones and/or secretion of  
 PT digestive/pancreatic enzymes and hormones.  
 XX  
 PS Disclosure; Page 27; 34pp; English.  
 XX  
 CC The invention relates to zsig33-like peptides and their corresponding  
 CC nucleic acids and methods for modulating gastric contractility, nutrient  
 CC uptake, growth hormones, secretion of digestive enzymes and hormones. The  
 CC sequences of the invention are used in the prevention, diagnosis and  
 CC treatment of diseases associated with inappropriate ZSIG33 expression.  
 CC The nucleic acids of the invention and their complements are used as DNA  
 CC probes in diagnostic assays to detect and quantitate the presence of  
 CC similar nucleic acids in samples, and therefore which patients may be in  
 CC need of restorative therapy. The ZSIG33 peptides are used as antigens in  
 CC the production of antibodies against ZSIG33 and in assays to identify  
 CC modulators of ZSIG33 expression and activity. The anti-ZSIG33 antibodies  
 CC and antagonists are used to down regulate expression and activity. The  
 CC anti-ZSIG33 antibodies are also used as diagnostic agents for detecting  
 CC the presence of ZSIG33 in samples (e.g. by enzyme linked immunosorbent  
 CC assay (ELISA)). The peptides and nucleic acids of the invention are used  
 CC to modulate gastric contractility, nutrient uptake, growth hormones, the  
 CC secretion of digestive enzymes and hormones, and/or secretion of enzymes  
 CC and/or hormones in the pancreas. zsig33-like DNA is used in gene therapy  
 CC and zsig33-like peptide is used in protein therapy. The present sequence  
 CC is human zsig33 protein  
 XX  
 SQ Sequence 117 AA;  
 Query Match 31.9%; Score 198; DB 5; Length 117;  
 Best Local Similarity 88.6%; Pred. No. 2.4e-14;  
 Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 Oy 1 MPSPCTVCSLLILGMLMDLDMAGSSFSPEHQVQVPPKAP 44  
 Db 1 MPSPGTVCSSLILGMLMDLDMAGSSFLSPHQVQVKKSKXP 44  
 RESULT 11  
 AAE15883  
 ID AAE15883 standard; protein; 117 AA.  
 XX  
 AC AAE15883;

XX  
 DT 26-MAR-2002 (first entry)  
 XX  
 DE Human zsig33 protein.  
 DE  
 XX Human; zsig33-like peptide; ZSIG3LP; immunity; developmental process;  
 KW infection; human immunodeficiency virus; vaccine; antihypoglycaemic;  
 KW adsorption enhancer; gastrointestinal disease; growth related disease;  
 KW inflammation; gene therapy; growth regulation; blood vessel formation;  
 KW HIV; zsig33 protein.  
 KM  
 XX Homo sapiens.  
 OS  
 XX Key Location/Qualifiers  
 FH Key 1..23  
 FT Peptide /label=Signal\_peptide  
 FT Protein 24..117  
 FT /note="Human mature zsig33 protein"  
 XX  
 PN WO200187933-A2.  
 XX  
 PD 22-NOV-2001.  
 PF  
 XX 10-MAY-2001; 2001WO-US015091.  
 PF  
 XX 11-MAY-2000; 2000US-00569271.  
 PR  
 XX (ZYMO ) ZYMOGENETICS INC.  
 PA  
 PI Jaepers SR, Sheppard PO, Deisher TA, Bishop PD;  
 DR WPI; 2002-082982/11.  
 DR N-PSDB; AAD25759.  
 XX  
 PT New polypeptides, useful for modulating gastric contractility, nutrient  
 PT uptake, pancreatic secretion of hormones, digestive enzymes and treating  
 PT gastrointestinal and growth related diseases, comprises zsig33-like  
 PT peptides.  
 XX  
 PS Disclosure; Page 80-81; 89pp; English.  
 XX  
 CC The invention relates to zsig33-like peptides (ZSIG3LP) including zsig33-  
 CC linker, zsig33-beta, zsig33-gamma, zsig33-delta and zsig33-epsilon  
 CC peptides and nucleic acid molecules encoding such zsig33-like peptides.  
 CC ZSIG3LP peptides activate the immune system in boosting immunity to  
 CC infectious diseases, treating immunocompromised patients such as human  
 CC immunodeficiency virus (HIV) patients, in improving vaccines and in  
 CC treatment of bacterial, viral, protozoal and fungal infections. Peptides  
 CC of the invention are used to identify and isolate receptors involved in  
 CC growth regulation in the liver, blood vessel formation and other  
 CC developmental processes. They are useful for evaluating functions of  
 CC hypothalamus-pituitary-adrenal axis, to modulate growth and/or  
 CC differentiation of tumour cells, as additives to anti-hypoglycaemic  
 CC preparations containing glucose and as adsorption enhancers for oral  
 CC drugs which require fast nutrient action and to stimulate glucose-induced  
 CC insulin release. They are also useful as research reagents for the  
 CC expansion, differentiation, growth factor and hormone secretion and/or  
 CC cell-cell interactions of tissues associated with gastrointestinal  
 CC system, brain and central nervous system. These molecules are useful for  
 CC treating dysfunction associated with contractile tissues or to suppress  
 CC or enhance contractility in vivo and to treat gastrointestinal and growth  
 CC related diseases. ZSIG3LP peptides, nucleic acids and/or antibodies are  
 CC useful for treating disorders associated with gastrointestinal  
 CC contractility, secretion of digestive enzymes, hormone and acids,  
 CC secretion of hormones in the pancreas and/or brain, gastrointestinal  
 CC motility, recruitment of digestive enzymes, inflammation and regulation  
 CC of nutrient absorption. Sequences of the invention are useful in gene  
 CC therapy. The present sequence is human zsig33 protein  
 XX  
 SQ Sequence 117 AA;  
 Query Match 31.9%; Score 198; DB 5; Length 117;  
 Best Local Similarity 88.6%; Pred. No. 2.4e-14;

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Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 1 MSPETVSLILGLTWLIDLMASSFLSPHQVQVPPHPKAP 44
Db 1 MSPETVCSLLILGLTWLIDLMASSFLSPHQVQVPPHPKAP 44

RESULT 12
ABUS8046
ID ABUS8046 standard; protein; 117 AA.
XX
AC ABUS8046;
XX
DT 14-APR-2003 (first entry)
XX
DE Human PRO polypeptide #78.
XX
KW Human; PRO; cytosolic; tumour; cancer; breast; lung; stomach; liver;
KW horse; cow; dog; cat; sheep; pig; goat; rabbit; ADEPR;
KW antibody-dependent enzyme mediated prodnrg therapy.
XX
OS Homo sapiens.
XX
PN US2003027163-A1.
XX
PD 06-FEB-2003.
XX
PF 15-NOV-2001; 2001US-00997666.
XX
PR 16-JUN-1997; 97US-0049787P.
PR 17-OCT-1997; 97US-0062250P.
PR 05-NOV-1997; 97WO-US020069.
PR 12-NOV-1997; 97US-0065186P.
PR 13-NOV-1997; 97US-0065311P.
PR 24-NOV-1997; 97US-0066770P.
PR 25-FEB-1998; 98US-0075945P.
PR 20-MAR-1998; 98US-0078910P.
PR 28-APR-1998; 98US-0083322P.
PR 07-MAY-1998; 98US-0084600P.
PR 28-MAY-1998; 98US-0087106P.
PR 02-JUN-1998; 98US-0087607P.
PR 02-JUN-1998; 98US-0087609P.
PR 02-JUN-1998; 98US-0087759P.
PR 03-JUN-1998; 98US-0087827P.
PR 04-JUN-1998; 98US-0088021P.
PR 04-JUN-1998; 98US-0088025P.
PR 04-JUN-1998; 98US-0088026P.
PR 04-JUN-1998; 98US-0088028P.
PR 04-JUN-1998; 98US-0088029P.
PR 04-JUN-1998; 98US-0088030P.
PR 04-JUN-1998; 98US-0088033P.
PR 04-JUN-1998; 98US-0088326P.
PR 05-JUN-1998; 98US-0088167P.
PR 05-JUN-1998; 98US-0088202P.
PR 05-JUN-1998; 98US-0088212P.
PR 05-JUN-1998; 98US-0088217P.
PR 09-JUN-1998; 98US-0088655P.
PR 10-JUN-1998; 98US-0088734P.
PR 10-JUN-1998; 98US-0088738P.
PR 10-JUN-1998; 98US-0088742P.
PR 10-JUN-1998; 98US-0088810P.
PR 10-JUN-1998; 98US-0088824P.
PR 10-JUN-1998; 98US-0088826P.
PR 11-JUN-1998; 98US-0088858P.
PR 11-JUN-1998; 98US-0088861P.
PR 11-JUN-1998; 98US-0088876P.
PR 12-JUN-1998; 98US-0089105P.
PR 16-JUN-1998; 98US-0089440P.
PR 16-JUN-1998; 98US-0089512P.
PR 16-JUN-1998; 98US-0089514P.
PR 17-JUN-1998; 98US-0089532P.
PR 17-JUN-1998; 98US-0089538P.
PR 17-JUN-1998; 98US-0089598P.
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DB 1 MPSBCTVCSLLILGLMLDLAAGSSFLSPHQRYVQVPPHAP 44

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AC ABUS9124;  
XX 28-APR-2003 (first entry)  
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XX XX Human; PRO; hypertrophy of neonatal heart; angiogenesis; wound healing;  
XX KM cardiac insufficiency disorder; cancer; tumour; immune response;  
XX KM adrenal cortical capillary endothelial growth; c-fos induction;  
XX KM vascular endothelial growth factor inhibition; VEGF inhibition;  
XX KM endothelial cell growth inhibitor; T-lymphocytes stimulation;  
XX KM retinal neurons cell survival; rod photoreceptor cell survival;  
XX KM retinal disorder; retinitis pigmentosa; kidney disorder;  
XX KM mammalian kidney mesangial cell proliferation; Berger disease;  
XX KM dermatitis; herpeticiformis; Crohn's disease; chondrocyte proliferation;  
XX KM chondrocyte redifferentiation; sports injury; arthritis.  
OS Homo sapiens.  
XX US2002132252-A1.  
PN 19-SEP-2002.  
XX PD 14-NOV-2001; 2001US-00990442.  
XX PF 16-JUN-1997; 97US-0049787P.  
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PR 28-AUG-2001; 2001US-00941992.  
XX  
PA (GERTH ) GENENTECH INC.  
XX  
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL,  
PI Ferrara N, Fong S, Garber H, Gerltzen ME, Goddard A, Godowski PJ,  
PI Grimaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan J, Paoni NP,  
PI Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM, Wood WI,  
PI Zhang Z;  
XX  
XX WPI; 2003-247083/24.  
DR N-PSDB; ABX80294.  
XX  
PT Novel isolated PRO polypeptides e.g., PRO826, PRO1068, PRO1184, PRO1346  
PT and PRO1375, which stimulate proliferation of stimulated T-lymphocytes  
PT are therapeutically useful for enhancing immune response and in cancer  
PT treatments.  
XX  
XX Claim 12; Fig 186; 648pp; English.  
XX  
CC The invention describes an isolated human PRO polypeptide. The PRO  
CC polypeptides are useful in detecting PRO polypeptides in a sample, in  
CC linking a bioactive molecule to a cell expressing a PRO polypeptide, and  
CC in modulating at least one biological activity of a cell expressing a PRO  
CC polypeptide. PRO1312 stimulates hypertrophy of neonatal heart and is thus

CC useful for treating cardiac insufficiency disorders. PRO1154 and PRO1186  
CC stimulate adrenal cortical capillary endothelial growth and PRO356,  
CC PRO943, PRO828, PRO826, PRO1068 or PRO355, PRO826, PRO819, PRO1126,  
CC PRO1350 and PRO1387 induce c-fos in endothelial cells, and are thus  
CC useful for treating conditions or disorders where angiogenesis would be  
CC beneficial, e.g. wound healing and antagonist of this polypeptide are  
CC useful for treating cancerous tumours. PRO812 inhibits vascular  
CC endothelial growth factor (VEGF) stimulated proliferation of endothelial  
CC cells and is thus useful for inhibiting endothelial cell growth in  
CC mammals which would be beneficial in inhibiting tumour growth. PRO826,  
CC PRO1068, PRO1184, PRO1346 and PRO1375 stimulate proliferation of  
CC stimulated T-lymphocytes and are therapeutically useful for enhancing  
CC immune response. PRO828, PRO826, PRO1068 or PRO1372 enhance survival of  
CC retinal neurons cells (PRO1132 is also enhances survival/proliferation of  
CC rod photoreceptor cells) and therefore are useful for treating retinal  
CC disorders of injuries, e.g. retinitis pigmentosa, AMD. PRO819, PRO813  
CC and PRO1106 induce proliferation of mammalian kidney mesangial cells,  
CC and therefore are useful for treating kidney disorders associated with  
CC decreased mesangial cell function such as Berger disease or other  
CC nephropathies associated with dermatitis, herpeticiformis or Crohn's  
CC disease. PRO1310, PRO844, PRO1312, PRO1192 and PRO1387 induce the  
CC proliferation and/or redifferentiation of chondrocytes in culture and are  
CC thus useful for treating sports injuries, and arthritis. This is the  
CC amino acid sequence of a novel human PRO protein  
XX  
SQ Sequence 117 AA;  
Query Match 31.9%; Score 198; DB 6; Length 117;  
Best Local Similarity 88.6%; Pred. No. 2,4e-14;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
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DB 1 MPSPGTCSLLLGMLMDLMAAGSFLSPHQVQRPHPKAP 44  
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AC ABU82636;  
XX  
DT 26-JUN-2003 (first entry)  
XX  
DE Human secreted/transmembrane protein PRO1066.  
XX  
XX Human; PRO; secreted protein; transmembrane protein;  
XX cardiac insufficiency disorders; angiogenesis; wound healing;  
XX cancerous tumour; immune response; retinal disorder; sight loss;  
XX retinitis pigmentosa; age-related macular degeneration; AMD;  
XX kidney disorder; Berger disease; nephropathy; dermatitis; herpeticiformis;  
XX Crohn's disease; sports injury; arthritis.  
XX  
XX Homo sapiens.  
XX  
XX US2003032023-A1.  
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PR 26-AUG-1998; 98US-0097979P.  
PR 26-AUG-1998; 98US-0097986P.  
PR 26-AUG-1998; 98US-0098014P.  
PR 31-AUG-1998; 98US-0098852P.  
PR 16-SEP-1998; 98US-0100634P.  
PR 16-SEP-1998; 98WO-US019330.  
PR 17-SEP-1998; 98US-0100858P.  
PR 17-SEP-1998; 98WO-US019437.  
PR 07-OCT-1998; 98WO-US021141.  
PR 01-DEC-1998; 98WO-US025108.  
PR 22-DEC-1998; 98US-0113296P.  
PR 05-JAN-1999; 99WO-US000106.  
PR 08-MAR-1999; 99WO-US005028.  
PR 12-MAR-1999; 99US-0123957P.  
PR 02-JUN-1999; 99WO-US012252.  
PR 23-JUN-1999; 99US-0141037P.  
PR 07-JUL-1999; 99US-0143048P.  
PR 20-JUL-1999; 99US-0144758P.  
PR 26-JUL-1999; 99US-0145698P.  
PR 28-JUL-1999; 99US-0146222P.  
PR 17-AUG-1999; 99US-0149369P.  
PR 15-SEP-1999; 99WO-US021090.  
PR 15-SEP-1999; 99WO-US021547.  
PR 08-OCT-1999; 99US-0158663P.  
PR 30-NOV-1999; 99WO-US028313.  
PR 01-DEC-1999; 99WO-US028301.  
PR 01-DEC-1999; 99WO-US028634.  
PR 16-DEC-1999; 99WO-US030095.  
PR 20-DEC-1999; 99WO-US030911.  
PR 05-JAN-2000; 2000WO-US000219.

PR 06-JAN-2000; 2000WO-US000376.  
PR 11-FEB-2000; 2000WO-US003565.  
PR 16-FEB-2000; 2000WO-US004341.  
PR 22-FEB-2000; 2000WO-US004414.  
PR 24-FEB-2000; 2000WO-US004914.  
PR 02-MAR-2000; 2000WO-US005004.  
PR 10-MAR-2000; 2000WO-US006319.  
PR 15-MAR-2000; 2000WO-US006884.  
PR 20-MAR-2000; 2000WO-US007377.  
PR 30-MAR-2000; 2000WO-US008439.  
PR 15-MAY-2000; 2000WO-US013358.  
PR 17-MAY-2000; 2000WO-US013705.  
PR 22-MAY-2000; 2000WO-US014042.  
PR 30-MAY-2000; 2000WO-US014941.  
PR 02-JUN-2000; 2000WO-US015264.  
PR 23-JUN-2000; 2000US-0213637P.  
PR 28-JUL-2000; 2000WO-US020710.  
PR 11-AUG-2000; 2000WO-US022031.

Query Match 31.9%; Score 198; DB 6; Length 117;  
Best Local Similarity 88.6%; Pred. No. 2.4e-14;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 MSPRGTCSTLLGLMVLMDLMAAGSFLSPRHQVQVPPHKA 44  
Db 1 MSPRGTCSTLLGLMVLMDLMAAGSFLSPRHQVQVPPHKA 44

## RESULT 15

ABO17836  
ID ABO17836 standard; protein; 117 AA.

XX AC ABO17836;

DT 26-AUG-2003 (first entry)

XX DE Novel human secreted and transmembrane protein PRO1066.

XX KM Human; secreted and transmembrane protein; PRO; antiinflammatory;  
KM antiarteriosclerotic; cardiact; anti-infertility; anti-HIV; cytosolic;  
KM antidiabetic; gene therapy; tumour necrosis factor (TNF)-alpha release;  
KM TNF-alpha release; cell proliferation; cell differentiation;  
KM gene expression modulator; proteoglycan release; cytokine release;  
KM tumour; inflammatory disease; organ failure; atherosclerosis;  
KM cardiac injury; infertility; birth defect; premature aging; AIDS;  
KM acquired immunodeficiency syndrome; cancer; diabetic complication;  
KM chromosome mapping; gene mapping; pharmaceutical; diagnostic; biosensor;  
KM bioreactor; tissue typing.

XX OS Homo sapiens.

XX PN US2003032156-A1.

XX PD 13-FEB-2003.

PF 06-MAY-2002; 2002US-00140474.

XX 31-MAR-1997; 97WO-US005230.  
PR 12-JUN-1998; 98WO-US012456.  
PR 14-JUL-1998; 98WO-US014552.  
PR 28-AUG-1998; 98WO-US017888.  
PR 10-SEP-1998; 98WO-US018624.  
PR 14-SEP-1998; 98WO-US019093.  
PR 14-SEP-1998; 98WO-US019177.  
PR 16-SEP-1998; 98WO-US019330.  
PR 17-SEP-1998; 98WO-US019437.  
PR 07-OCT-1998; 98WO-US021141.  
PR 29-OCT-1998; 98WO-US022991.  
PR 29-OCT-1998; 98WO-US022992.  
PR 20-NOV-1998; 98WO-US024855.  
PR 01-DEC-1998; 98WO-US025108.

PR 05-JAN-1999; 99WO-US000106.  
PR 08-MAR-1999; 99WO-US005028.  
PR 10-MAR-1999; 99WO-US005190.  
PR 20-APR-1999; 99WO-US008615.  
PR 14-MAY-1999; 99WO-US010733.  
PR 02-JUN-1999; 99WO-US012252.  
PR 01-SEP-1999; 99WO-US020111.  
PR 08-SEP-1999; 99WO-US020594.  
PR 13-SEP-1999; 99WO-US020944.  
PR 15-SEP-1999; 99WO-US021090.  
PR 15-SEP-1999; 99WO-US021547.  
PR 05-OCT-1999; 99WO-US023089.  
PR 29-NOV-1999; 99WO-US028214.  
PR 30-NOV-1999; 99WO-US028313.  
PR 30-NOV-1999; 99WO-US028409.  
PR 01-DEC-1999; 99WO-US028501.  
PR 01-DEC-1999; 99WO-US028634.  
PR 02-DEC-1999; 99WO-US028851.  
PR 02-DEC-1999; 99WO-US028854.  
PR 02-DEC-1999; 99WO-US028865.  
PR 16-DEC-1999; 99WO-US030095.  
PR 20-DEC-1999; 99WO-US030911.  
PR 20-DEC-1999; 99WO-US030999.  
PR 22-DEC-1999; 99WO-US030720.  
PR 30-DEC-1999; 99WO-US031243.  
PR 30-DEC-1999; 99WO-US031274.  
PR 05-JAN-2000; 2000WO-US000219.  
PR 06-JAN-2000; 2000WO-US000277.  
PR 06-JAN-2000; 2000WO-US000376.  
PR 11-FEB-2000; 2000WO-US003365.  
PR 18-FEB-2000; 2000WO-US004341.  
PR 18-FEB-2000; 2000WO-US004414.  
PR 22-FEB-2000; 2000WO-US004914.  
PR 24-FEB-2000; 2000WO-US004914.  
PR 24-FEB-2000; 2000WO-US005004.  
PR 01-MAR-2000; 2000WO-US005601.  
PR 02-MAR-2000; 2000WO-US005746.  
PR 02-MAR-2000; 2000WO-US005841.  
PR 10-MAR-2000; 2000WO-US006319.  
PR 15-MAR-2000; 2000WO-US006884.  
PR 20-MAR-2000; 2000WO-US007377.  
PR 21-MAR-2000; 2000WO-US007532.  
PR 30-MAR-2000; 2000WO-US008439.  
PR 17-MAY-2000; 2000WO-US013705.  
PR 22-MAY-2000; 2000WO-US014042.  
PR 30-MAY-2000; 2000WO-US014941.  
PR 02-JUN-2000; 2000WO-US015264.  
PR 28-JUL-2000; 2000WO-US020710.  
PR 11-AUG-2000; 2000WO-US022031.  
PR 23-AUG-2000; 2000WO-US023522.  
PR 24-AUG-2000; 2000WO-US023528.  
PR 08-NOV-2000; 2000WO-US030952.  
PR 10-NOV-2000; 2000WO-US030873.  
PR 01-DEC-2000; 2000WO-US032678.  
PR 20-DEC-2000; 2000US-00747259.  
PR 20-DEC-2000; 2000WO-US034956.  
PR 28-FEB-2001; 2001US-00796498.  
PR 28-FEB-2001; 2001WO-US006520.  
PR 01-MAR-2001; 2001WO-US006666.  
PR 09-MAR-2001; 2001US-00802706.  
PR 14-MAR-2001; 2001US-00806889.  
PR 22-MAR-2001; 2001US-00816744.  
PR 05-APR-2001; 2001US-00828366.  
PR 10-MAY-2001; 2001US-00854208.  
PR 18-MAY-2001; 2001US-00860216.  
PR 25-MAY-2001; 2001US-00866028.  
PR 25-MAY-2001; 2001US-00866034.  
PR 25-MAY-2001; 2001WO-US017092.  
PR 01-JUN-2001; 2001US-00872035.  
PR 01-JUN-2001; 2001WO-US017800.  
PR 05-JUN-2001; 2001US-00874503.  
PR 14-JUN-2001; 2001US-00882636.

PR 19-JUN-2001; 2001US-00886342.  
 PR 20-JUN-2001; 2001WO-US019692.  
 PR 21-JUN-2001; 2001US-00887879.  
 PR 22-JUN-2001; 2001WO-US020116.  
 PR 29-JUN-2001; 2001WO-US021066.  
 PR 09-JUL-2001; 2001US-00908827.  
 PR 18-JUL-2001; 2001US-00908827.  
 PR 06-AUG-2001; 2001US-00924419.  
 PR 09-AUG-2001; 2001US-00927796.  
 PR 16-AUG-2001; 2001US-00931836.  
 PR 19-DEC-2001; 2001US-00028072.  
 XX  
 XX (GETH ) GENENTECH INC.  
 PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;  
 PI Gettersen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;  
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;  
 XX  
 DR WPI; 2003-341980/32.  
 DR N-PSDB; ACD24073.  
 XX  
 PT New secreted and transmembrane PRO nucleic acids, for treating  
 PT inflammation, organ failure, atherosclerosis, cardiac injury,  
 PT infertility, birth defects, premature aging, acquired immunodeficiency  
 PT syndrome (AIDS), or cancer.  
 XX  
 PS Claim 12; Fig 442; 660pp; English.  
 CC The invention describes an isolated nucleic acid (I) comprising, or which  
 CC has 80 % sequence identity to, or the full-length coding sequence of, one  
 CC of 275 nucleotide sequences, and which encodes a corresponding  
 CC polypeptide selected from 275 amino acid sequences, where all sequences  
 CC are given in the specification. The polypeptide encoded by (I) is used to  
 CC detect PRO polypeptides, link a bioactive molecule to a cell expressing a  
 CC PRO polypeptide, modulate a biological activity of a cell, stimulate the  
 CC release of tumour necrosis factor (TNF)-alpha from human blood, modulate  
 CC the uptake of glucose or free fatty acid by cells, stimulate or inhibit  
 CC the proliferation or differentiation of cells or gene expression,  
 CC stimulate the release of proteoglycans, stimulate the release of cytokine  
 CC from peripheral blood mononuclear cells, inhibit the binding of A-peptide  
 CC to factor VIIa, or detect the presence of tumour in a mammal. The nucleic  
 CC acid and polypeptide encoded by it, are useful for treating inflammatory  
 CC diseases, organ failure, atherosclerosis, cardiac injury, infertility,  
 CC birth defects, premature aging, acquired immunodeficiency syndrome  
 CC (AIDS), cancer, or diabetic complications. The nucleic acid is useful as  
 CC hybridisation probes, in chromosome and gene mapping, and in generating  
 CC antisense RNA or DNA. The polypeptides are useful as pharmaceuticals,  
 CC diagnostics, biosensors or bioreactors. Both are useful in tissue typing.  
 CC This is the amino acid sequence of a novel human secreted and  
 CC transmembrane PRO polypeptide  
 XX  
 SQ Sequence 117 AA;

Query Match 31.9%; Score 198; DB 6; Length 117;  
 Best Local Similarity 88.6%; Pred.No. 2.4e-14;  
 Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 MSPSGTVCSTLLGLTWLMDLMAAGSFTLSPRHQRVQVPRPKAP 44  
 ||||||||||||||||||||||||||||||||||||||||  
 Db 1 MSPSGTVCSTLLGLTWLMDLMAAGSFTLSPRHQRVQVPRPKAP 44

Search completed: July 26, 2005, 14:29:20  
 Job time : 177 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

# OM protein - protein search, using sw model

Run on: July 26, 2005, 14:19:28 ; Search time 40 Seconds  
(without alignments)  
281.434 Million cell updates/sec

Title: US-10-659-782B-32

Perfect score: 620

Sequence: 1 MPSPGTVCSLLILGMLWLDL.....PPSSRRSRSHQSPSCPEL 117

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: PIR.79.\*  
2: PIR1.\*  
3: PIR2.\*  
4: PIR4.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	198	31.9	117	1 A59316	ghrelin precursor
2	158	25.5	117	1 B59316	ghrelin precursor
3	78	12.6	136	2 AG0449	regulator of nucle
4	73.5	11.9	2018	2 T34274	hypothetical prote
5	73	11.8	573	2 JC4335	anti-mullerian hor
6	73	11.8	725	1 B64211	virulence-associat
7	72.5	11.7	555	2 H83043	hypothetical prote
8	72	11.6	666	2 T22943	hypothetical prote
9	71.5	11.5	764	2 I48882	thyrotropin recept
10	70.5	11.4	309	2 S77905	lyase - Pseudomona
11	70.5	11.4	383	2 A56084	interleukin-1beta
12	69	11.1	302	2 H96792	unknown protein F1
13	69	11.1	1487	2 S62048	probable membrane
14	68	11.0	796	2 T32425	hypothetical prote
15	68	11.0	1474	2 B85188	retrotransposon 1i
16	68	11.0	2088	2 B71436	hypothetical prote
17	67.5	10.9	764	2 A35956	thyrotropin recept
18	67	10.8	187	2 T51876	hypothetical prote
19	67	10.8	363	2 F91265	sensor protein Bas
20	67	10.8	363	2 C86106	sensor protein for
21	67	10.8	363	2 JX0285	sensor protein bas
22	67	10.8	449	2 C39926	hypothetical 51.8K
23	67	10.8	519	2 G84707	probable MYB famil
24	66.5	10.7	263	2 C56084	interleukin-1beta
25	66.5	10.7	311	2 B56084	interleukin-1beta
26	66.5	10.7	749	2 A75560	conserved hypotet
27	66	10.6	428	2 JH0634	site-specific DNA-
28	66	10.6	1001	2 T28897	hypothetical prote
29	65.5	10.6	304	2 S25080	bifunctional cycla

30	65.5	10.6	307	2 T33503	hypothetical prote
31	65	10.5	1027	2 B64187	conserved hypotet
32	64.5	10.4	381	2 S16506	hypothetical prote
33	64.5	10.4	415	2 S32932	regulatory protein
34	64.5	10.4	708	2 A38436	mitosis initiation
35	64	10.3	188	2 T19507	hypothetical prote
36	64	10.3	354	2 G75548	ABC transporter. A
37	64	10.3	467	1 S45483	serine proteinase
38	64	10.3	502	2 T36589	probable transmemb
39	64	10.3	540	2 T27400	hypothetical prote
40	64	10.3	637	2 T03842	fission yeast Skb1
41	64	10.3	695	2 T13648	mitosis initiation
42	64	10.3	749	2 S77175	senory transducti
43	64	10.3	6805	2 S20901	titin - rabbit (fr
44	63.5	10.2	221	2 A57296	ribosomal protein
45	63.5	10.2	746	2 T19409	hypothetical prote

## ALIGNMENTS

```

RESULT 1
A59316
ghrelin precursor - human
N:Alternate names: preproghrelin
C:Species: Homo sapiens (man)
C:Date: 16-Jun-2000 #sequence_revision 16-Jun-2000 #text_change 09-Jul-2004
C:Accession: A59316
R:Kojima, M.; Hosoda, H.; Date, Y.; Nakazato, M.; Matsuo, H.; Kangawa, K.
Nature 402, 656-660, 1999
A:Title: Ghrelin is a growth-hormone-releasing acylated peptide from stomach.
A:Reference number: A59316; MUID:20067959; PMID:10604470
A:Accession: A59316
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-117 <KOJ>
A:Cross-references: UNIPROT:Q9UBUJ; GB:AB029434; NID:96691571; PIDN:BAAB9371.1; PID:9669
A:Experimental source: tissue stomach endocrine cells
A>Note: Submitted to GenBank, June 1999
C:Comment: Ghrelin secreted by the stomach stimulates the release of somatotropin (growth
C:Superfamily: motilin
C:Keywords: hormone; lipoprotein; stomach
F:1-23/Domain: signal sequence #status predicted <SIG>
F:52-51/Produce: ghrelin #status predicted <MAT>
F:52-117/Domain: carboxyl-terminal propeptide #status predicted <CTP>
F:26/Binding site: octanoate (Ser) (covalent) #status experimental

Query Match      31.9%  Score 198;  DB 1;  Length 117;
Best Local Similarity 88.6%  Pred. No. 1.8e-13;
Matches 39;  Conservative 0;  Mismatches 5;  Indels 0;  Gaps 0;

QY      1 MPSPGTVCSLLILGMLWLDLMAAGSSFLSPDHQVRVQVRPPHKAP 44
Db      1 MPSPGTVCSLLILGMLWLDLMAAGSSFLSPDHQVRVQVRPPHKAP 44

RESULT 2
B59316
ghrelin precursor - rat
N:Alternate names: preproghrelin
C:Species: Rattus norvegicus (Norway rat)
C:Date: 16-Jun-2000 #sequence_revision 16-Jun-2000 #text_change 09-Jul-2004
C:Accession: B59316
R:Kojima, M.; Hosoda, H.; Date, Y.; Nakazato, M.; Matsuo, H.; Kangawa, K.
Nature 402, 656-660, 1999
A:Title: Ghrelin is a growth-hormone-releasing acylated peptide from stomach.
A:Reference number: A59316; MUID:20067959; PMID:10604470
A:Accession: B59316
A:Status: not compared with conceptual translation
A:Molecule type: mRNA; protein
A:Residues: 1-117 <KOJ>
A:Cross-references: UNIPROT:Q9QYH7; GB:AB029433; NID:96691569; PIDN:BAAB9370.1; PID:9669.
A:Experimental source: strain SD; tissue stomach endocrine cells

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A>Note: submitted to GenBank, June 1999  
 C:Comment: Ghrelin secreted by the stomach stimulates the release of somatotropin (growth)  
 C:Superfamily: molin  
 C:Keywords: hormone, lipoprotein, stomach  
 F:1-23/Domain: signal sequence #status predicted <SIG>  
 F:24-51/Product: ghrelin #status predicted <MAT>  
 F:52-117/Domain: carboxyl-terminal propeptide #status predicted <CTP>  
 F:26/Binding site: octanoate (Ser) (covalent) #status experimental

Query Match 25.5%; Score 158; DB 1; Length 117;  
 Best Local Similarity 40.0%; Pred. No. 2.6e-09;  
 Matches 42; Conservative 7; Mismatches 34; Indels 22; Gaps 2;

QY 1 MPSPGTCSTLLGMLMDLMAAGSFLSPHQRVQVRPHKAPHVVPALPLSNQCDLE 60  
 DB 1 MVSATTCSTLLSLMLMDMAAGSFLSPHQRVQVRPHKAPHVVPALPLSNQCDLE 54

QY 61 QQRH-----LMAVSFQSTKSGSDLTVSGRTWG 89  
 DB 55 GMLHPEDRGQAEAEFELEIRFNPFPVGTLSGAQYQQRGRALG 99

RESULT 3  
 AG0449  
 regulator of nucleoside diphosphate kinase rnk [imported] - Yersinia pestis (strain CO92  
 C:Species: Yersinia pestis  
 C>Date: 02-Nov-2001 #sequence\_revision 02-Nov-2001 #text\_change 09-Jul-2004  
 C:Accession: AG0449  
 R:Parikh, J.; Wren, B.W.; Thomson, N.R.; Tibball, R.W.; Holden, M.T.G.; Prentice, M.B.;  
 deno-Tarraga, A.M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P.; Dougan, G.;  
 11, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barrett,  
 Nature 413, 523-527, 2001  
 A:Title: Genome sequence of Yersinia pestis, the causative agent of plague.  
 A:Reference number: AB0001; MUID:21470413; PMID:11586350  
 A:Accession: AG0449  
 A:Status: preliminary  
 A:Molecule type: DNA  
 A:Residues: 1-136 <KUR>  
 A:Cross-references: UNIPROT:Q8ZAU1; GB:AL590842; PIDN:CAC93163.1; PID:q15981613; GSPDB:C  
 C:Genetics:  
 A:Gene: rnk

Query Match 12.6%; Score 78; DB 2; Length 136;  
 Best Local Similarity 26.2%; Pred. No. 0.65;  
 Matches 28; Conservative 14; Mismatches 39; Indels 26; Gaps 3;

QY 21 AMAGS---SFLSPHQVRQVRPHKAPHVVPALPLSNQCDL-BOQRHLMASVFSQSTKD 76  
 DB 24 AFAGSVVATALNEELDRALILPNEIPADVVVTMSRVFLLDLSQEEHIRTLYVPASIKD 83

QY 77 SCSDLTV-----SGRTWGLRPLNLLPSPS 101  
 DB 84 SNEQLSVNAPLGLALLGLHVNDEISWKLPGSDETRITVLELLYQPS 130

RESULT 4  
 T34274  
 hypotheoretical protein F46H5.4 - Caenorhabditis elegans  
 C:Species: Caenorhabditis elegans  
 C>Date: 29-Oct-1999 #sequence\_revision 29-Oct-1999 #text\_change 09-Jul-2004  
 C:Accession: T34274  
 A:Reference number: 221498  
 A:Status: preliminary; translated from GB/EMBL/DBJ  
 A:Molecule type: DNA  
 A:Residues: 1-2018 <NHA>  
 A:Cross-references: UNIPROT:Q20487; EMBL:U41543; PINN:AA837023.1; GSPDB:GN00028; CESP:F4  
 A:Experimental source: strain Bristol N2; clone F46H5  
 C:Genetics:  
 A:Gene: CESP:F46H5.4

A:Map position: X  
 A:Introns: 16/2; 52/3; 87/2; 116/2; 138/2; 203/1; 265/3; 317/2; 337/3; 378/1; 428/1; 482/  
 7/3; 1491/3; 1560/2; 1632/2; 1753/3; 1830/2; 1862/2; 1927/3

Query Match 11.9%; Score 73.5; DB 2; Length 2018;  
 Best Local Similarity 31.2%; Pred. No. 38;  
 Matches 25; Conservative 7; Mismatches 31; Indels 17; Gaps 4;

QY 38 RPHKAPHVVPALPLSNQCDLEQQRHLMASVFSQSTKSGSDLTVS--GRTWGLRVLR 95  
 DB 652 RTHFTEIKLSIP-----CDLNDGHLHLLFTVHHSCKGSDSSSTSPIGYTH----- 659

QY 96 LFP--PSRERSRRSHQPSG 113  
 DB 700 -LPLVNGKLRSGNPLPVC 718

RESULT 5  
 JC4335  
 anti-mullerian hormone type II receptor precursor - human  
 C:Species: Homo sapiens (man)  
 C>Date: 06-Dec-1995 #sequence\_revision 08-Feb-1996 #text\_change 16-Aug-2004  
 C:Accession: JC4335  
 R:Visser, J.A.; Mcluskey, A.; van Beers, T.; Weghuis, D.O.; van Kessel, A.G.; Grootegeed,  
 Biochem. Biophys. Res. Commun. 215, 1029-1036, 1995  
 A:Title: Structure and chromosomal localization of the human anti-mullerian hormone type  
 A:Reference number: JC4335; MUID:96028015; PMID:7488027  
 A:Accession: JC4335  
 A:Molecule type: mRNA  
 A:Residues: 1-573 <KYS>  
 A:Cross-references: UNIPROT:Q16671; GB:X91156; NID:g1107671; PIDN:CA62593.1; PID:e19804  
 C:Comment: This is a receptor for anti-mullerian hormone (see PIR:WFHMU). It plays a crit  
 C:Genetics:  
 A:Gene: GDB:AMHR2  
 A:Cross-references: GDB:696210; OMIM:600956  
 A:Map position: 12q13-12q13  
 A:Introns: 16/3; 77/3; 141/3; 167/3; 207/2; 284/2; 322/3; 380/2; 429/3; 475/2  
 C:Superfamily: protein kinase homology  
 C:Keywords: ATP; hormone receptor; transmembrane protein  
 F:1-16/Domain: signal sequence #status predicted <SIG>  
 F:17-573/Product: anti-mullerian hormone type II receptor #status predicted <MAT>  
 F:17-141/Domain: extracellular hormone binding #status predicted <ELB>  
 F:142-167/Domain: transmembrane #status predicted <TM>  
 F:201-512/Domain: protein kinase homology <KIN>

Query Match 11.8%; Score 73; DB 2; Length 573;  
 Best Local Similarity 27.4%; Pred. No. 11;  
 Matches 34; Conservative 15; Mismatches 35; Indels 40; Gaps 6;

QY 3 SPGTVC-----LTLGMLMDLMAAGS---SFLSPHQVRQVRPHKAP 44  
 DB 128 SPGTGSGQQAAPGESIMMALVULGIFLLLVLSIIALLQKRNRYRGPVPEPRP 187

QY 45 H-----VVPALPLSNQCDLEQQRHLMASVFSQSTKSGSDLTVSGRTWGLRVLR 97  
 DB 188 DSGRDMSEVLEQLP---ELC-----FSQVIREGSHVAVVAGOLQGLVAKAF 232

QY 98 PPS 101  
 DB 233 PPS 236

RESULT 6  
 E64211  
 virulence-associated protein vacB homolog - Mycoplasma genitalium  
 C:Species: Mycoplasma genitalium  
 C>Date: 10-Sep-1999 #sequence\_revision 10-Sep-1999 #text\_change 09-Jul-2004  
 C:Accession: E64211  
 R:Fraser, C.M.; Gockyne, J.D.; White, O.; Adams, M.D.; Clayton, R.A.; Fleischmann, R.D.;  
 M.; Fuhman, J.; Nguyen, D.; Uterback, T.R.; Saudek, D.M.; Phillips, C.A.; Merrick, J.  
 Science 270, 397-403, 1995  
 A:Title: The minimal gene complement of Mycoplasma genitalium.

[illegible][illegible]

A:Experimental source: strain 22  
C:Genetics:  
A:Gene: glpB  
C:Superfamily: Pseudomonas pseudomallei lyase

Query Match 11.4%; Score 70.5; DB 2; Length 309;  
Best Local Similarity 22.0%; Pred. No. 9.8;  
Matches 29; Conservative 16; Mismatches 36; Indels 51; Gaps 5;

QY 2 PSEPTGSLLLGLMLDLMAAGSSFLSPHQVQVPPHKAHPV-----VPLPALPLS 53  
DB 14 PEPGIV-----LSGVHKSRRGRPPKAAVLAARKVSPVIAADPRA 53

QY 54 NQLCDLEQORHLMAVSFQSTKDSGSDLT-----VSGRTWGL-----RVIANRLFP 98  
DB 54 PQ-----HSWNSRVDADRERGSTKTRNPNREEVITCMKSMVNHPEPILNSQFA 105

QY 99 PSSRRSRRSRSHQ 110  
DB 106 RKSINAAKPSHR 117

RESULT 11  
A:56084  
Interleukin-1beta converting enzyme beta isozyme - human  
C:Species: Homo sapiens (man)  
C:Date: 03-Oct-1995 #sequence\_revision 03-Oct-1995 #text\_change 09-Jul-2004  
C:Accession: A56084  
R:Alnemri, E.S.; Fernandes-Alnemri, T.; Litwack, G.  
J. Biol. Chem. 270, 4312-4317, 1995  
A:Title: Cloning and expression of four novel isoforms of human interleukin-1beta conver  
A:Reference number: A56084; MUID:95181414; PMID:7876192  
A:Accession: A56084  
A:Status: preliminary  
A:Molecule type: mRNA  
A:Residues: 1-383 <ALN>  
A:Cross-references: UNIPROT:P29466; GB:U13697; NID:g717039; PIDN:AAG50107.1; PID:g717040  
C:Genetics:  
A:Gene: IL1BCE  
C:Keywords: alternative splicing

Query Match 11.4%; Score 70.5; DB 2; Length 383;  
Best Local Similarity 22.0%; Pred. No. 12;  
Matches 27; Conservative 20; Mismatches 37; Indels 39; Gaps 4;

QY 1 MPSEPTVSLLLGLMLDLMAAGSSFLSPHQVQVPPHKAHPVVALPLSN----- 54  
DB 62 IPKGAQACQICITTYICEDSYIAGTLGISAAPQAVQDN-----PAMPTSSSGSGNV 112

QY 55 QLCDLEQORHLMAVSFQSTKDSGSDLT-----VSGRTWGL 90  
DB 113 KCLSLSEKQRIWKQKSAEITPIMDKSRTRLALICNEEPDSIPRTGAEVDITGMWLL 172

QY 91 RVL 93  
DB 173 QNL 175

RESULT 12  
H96792  
Unknown protein F14G6.10 [imported] - Arabidopsis thaliana  
C:Species: Arabidopsis thaliana (mouse-ear cress)  
C:Date: 02-Mar-2001 #sequence\_revision 02-Mar-2001 #text\_change 09-Jul-2004  
C:Accession: H96792  
R:Theologis, A.; Ecker, J.R.; Palm, C.J.; Federici, N.A.; Kaul, S.; White, O.; Alonso,  
Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K.;  
ansen, N.F.; Hughes, B.; Hultzer, L.  
Nature 408, 816-820, 2000  
A:Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C.  
C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.R.; Luros, J.S.; Maiti, K.; Matzila,  
Rizzo, M.; Rooney, T.; Rowley, J.; Sakano, H.  
A:Authors: Salberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon,  
ker, M.; Wu, D.; Yu, G.; Frazer, C.M.; Venter, J.C.; Davis, R.W.

A:Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.  
A:Reference number: A86141; MUID:21016719; PMID:11130712  
A:Accession: H96792  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-302 <STO>  
A:Cross-references: UNIPROT:Q9C9K7; GB:AE005173; NID:g6642668; PIDN:AAF20248.1; GSPDB:GNC  
C:Genetics:  
A:Gene: F14G6.10  
A:Map position: 1  
C:Superfamily: Arabidopsis thaliana hypothetical protein T12H17.200

Query Match 11.4%; Score 69; DB 2; Length 302;  
Best Local Similarity 31.6%; Pred. No. 14;  
Matches 30; Conservative 6; Mismatches 31; Indels 28; Gaps 6;

QY 30 PE-HQVQVPP-HKAPHVVALPLSNQLCDLEQORHLMAVSFQSTKDSGSDLTVSGRT 87  
DB 21 PELHQLQPOPLHPQPOPOQONSDDE-----SDSNKDGSDPVTSGST 70

QY 88 WGLRVNRLFPSSRRSR-----RSH 109  
DB 71 -GKPRGR--PPGSKNKPPIVTRDSPNVLSH 102

RESULT 13  
S62048  
Probable membrane protein YGL197w - Yeast (Saccharomyces cerevisiae)  
N:Alternate names: Hypothetical protein G1307  
C:Species: Saccharomyces cerevisiae  
C:Date: 10-Apr-1996 #sequence\_revision 19-Apr-1996 #text\_change 09-Jul-2004  
C:Accession: S62048; S64214  
R:Klima, R.; Cogilevina, M.; Bertani, I.; Zaccaria, P.; Bruechi, C.V.  
submitted to the EMBL Data Library, September 1995  
A:Reference number: S62045  
A:Accession: S62048  
A:Molecule type: DNA  
A:Residues: 1-1487 <KLI>  
A:Cross-references: UNIPROT:P51094; EMBL:X91837; NID:g1177627; PID:e203620; PID:g1177631  
A:Experimental source: strain FY1679  
R:Brusch, C.V.; Cogilevina, M.; Bertani, I.; Klima, R.; Zaccaria, P.; Delneri, D.  
submitted to the Protein Sequence Database, May 1996  
A:Reference number: S64183  
A:Accession: S64214  
A:Molecule type: DNA  
A:Residues: 1-1487 <BRU>  
A:Cross-references: EMBL:Z72719; NID:g1322824; PID:e243500; PID:g1322825; MIFS:YGL197w  
A:Experimental source: strain S288C  
C:Genetics:  
A:Gene: SGD:MDS3  
A:Cross-references: SGD:S0003165; MIFS:YGL197w  
A:Map position: 7L  
C:Keywords: transmembrane protein  
F:1034-1050/Domain: transmembrane #status predicted <TM1>  
F:1052-1068/Domain: transmembrane #status predicted <TM2>

Query Match 11.1%; Score 69; DB 2; Length 1487;  
Best Local Similarity 25.7%; Pred. No. 79;  
Matches 37; Conservative 10; Mismatches 37; Indels 60; Gaps 6;

QY 25 SSFSPHQVQVPPHKAHPVVALPL-----SNQLCDLEQ-----ORHLMAVSF 70  
DB 769 SSISEAHQR-----RASHPLTSSFLFSDSGPCCKQLQQLQHITIQPHNLSRRF 821

QY 71 SOSTKDSGSDLTVSGRTW-----LRVINRLFPSSRR----- 103  
DB 822 SRSARSSISYSSSDRGNSISRSSTDSFGTPVVLGVINVLPLPOTREBNBPSPCPA 881

QY 104 -----RSRR-----HQSPSP 115  
DB 882 MSTGSNTRRSNTLTDYHNSKASP 905



## RESULT 14

T32425

hypothetical protein C10E2.3 - Caenorhabditis elegans

C:Species: Caenorhabditis elegans

C:Date: 29-Oct-1999 #sequence\_revision 29-Oct-1999 #text\_change 09-Jul-2004

C:Accession: T32425

R:Wohlmann, P.; Sansone, J.

submitted to the EMBL Data Library, September 1997

A:Description: The sequence of C. elegans coamid C10E2.

A:Reference number: Z2165

A:Accession: T32425

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1796 &lt;NOH&gt;

A:Cross-references: UNIPROT:O17323, EMBL:AF026202, PIDD:ABE71243.1, GSPDB:GN00028, CESP:

A:Experimental source: strain Bristol N2; clone C10E2

C:Genetics:

A:Gene: CESP:C10E2.3

A:Map position: X

A:Introns: 85/2; 220/2; 269/1; 305/1; 519/3; 576/3; 724/3; 755/3.

## Query Match

11.0%; Score 68; DB 2; Length 796;

Best Local Similarity 28.6%; Pred. No. 51;

Matches 28; Conservative 15; Mismatches 35; Indels 20; Gaps 4;

QY 18 LDLMAGSSFLSPHQRYQV--RPHKAPHVVPALPLSNQCDLEQRIHMASVFSQSTKD 76

Db 47 LSLANSLTNLSSNSGNISVPQTPKEHH--PTAPTSNRKCDLPRSN--STTISQLTKD 101

QY 77 SGSDLTVSGRTWGLVNLRLFPSSRSRERSRSHQSPCS 114

Db 102 -----RLKMIANRSKGESNSQSNLMSNS 125

## RESULT 15

B85188

retrotransposon like protein [imported] - Arabidopsis thaliana

C:Species: Arabidopsis thaliana (mouse-ear cress)

C:Date: 16-Feb-2001 #sequence\_revision 16-Feb-2001 #text\_change 09-Jul-2004

C:Accession: B85188

R:anonymous, The European Union Arabidopsis Genome Sequencing Consortium, The Cold Spring

Nature 402, 769-777, 1999

A:Title: Sequence and analysis of chromosome 4 of the plant Arabidopsis thaliana.

A:Reference number: A85001; MUID:20083488; PMID:10617198

A:Accession: B85188

A:Status: preliminary

A:Molecule type: DNA

A:Residues: 1-1474 &lt;STO&gt;

A:Cross-references: UNIPROT:O23529; GB:NC\_001268; NID:G5302802; PIDD:CAB46043.1; GSPDB:C

C:Genetics:

A:Gene: d14465c

A:Map position: 4

C:Superfamily: retrovirus-related polyprotein

## Query Match

11.0%; Score 68; DB 2; Length 1474;

Best Local Similarity 27.0%; Pred. No. 1e+02;

Matches 30; Conservative 19; Mismatches 42; Indels 20; Gaps 5;

QY 16 LMLDLAMAGSSFL--SPHQRYQVAPPKAPHV---PALPLSNQCDLEQRIHMASV 70

Db 716 VFLGYSLTQTAYLCDFVEHKL-----YTSRHVVFDEASPPFSN---LTSQNSLPVTVF 766

QY 71 SQSTKD-----SGSDLTVSGRTWGLVNLRLFPSSRSRERSRSHQSPCS 115

Db 767 EQSSSPVTPILSSSVLPSCLSPECTVLAHQQPPVTPNPSHSEQPTTSP 817

Search completed: July 26, 2005, 14:30:05  
 Job time : 42 secs

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GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: July 26, 2005, 14:10:22 ; Search time 179 Seconds

(without alignments)  
334.711 Million cell updates/sec

Title: US-10-659-782B-32

Perfect score: 620  
Sequence: 1 MPSPGTCVCSLLILGMLMIDL.....PPSSRRSRSRHSCSPSEL 117

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

UniProt 03:\*  
1: uniprot\_sprot:\*  
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	198	31.9	91	2	Q86YP8
2	198	31.9	117	2	Q86YP8
3	194	31.3	117	1	Q6UDE7
4	180	29.0	117	1	Q86Y66
5	171.5	27.7	116	1	Q86Y67
6	165	26.6	117	2	Q86Y67
7	163	26.3	117	1	Q86Y67
8	162	26.1	86	2	Q86Y67
9	162	26.1	117	1	Q86Y67
10	158.5	25.6	78	2	Q86Y67
11	158	25.5	117	1	Q86Y67
12	157.5	25.4	116	2	Q86Y67
13	150.5	24.3	74	2	Q86Y67
14	150.5	24.3	118	1	Q86Y67
15	147	23.7	54	2	Q86Y67
16	146	23.5	54	2	Q86Y67
17	145.5	23.5	116	1	Q86Y67
18	145	23.4	52	2	Q86Y67
19	145	23.4	54	2	Q86Y67
20	145	23.4	54	2	Q86Y67
21	142	22.9	54	2	Q86Y67
22	135.5	21.9	65	2	Q86Y67
23	133	21.0	54	2	Q86Y67
24	130	21.0	54	2	Q86Y67
25	123.5	19.8	54	2	Q86Y67
26	122.5	19.8	54	2	Q86Y67
27	113.5	18.3	97	2	Q86Y67
28	101	16.3	35	2	Q86Y67
29	98.5	15.9	116	2	Q86Y67
30	95	15.3	114	2	Q86Y67
31	95	15.3	124	2	Q86Y67

32	93	15.0	116	2	Q6VMJ5
33	93	15.0	116	2	Q6VMJ6
34	81	13.1	100	2	Q52856
35	78	12.6	136	2	Q655H9
36	78	12.6	136	2	Q8ZAU1
37	76	12.6	1218	2	Q9W201
38	76	12.3	1222	1	WNK4_MOUSE
39	75.5	12.2	208	2	Q6V501
40	75	12.1	116	2	Q7T2V1
41	75	12.1	116	2	Q8AV73
42	74	11.9	256	2	Q8S2U0
43	74	11.9	478	2	Q647K2
44	74	11.9	573	1	AMH2_HUMAN
45	74	11.9	1688	2	Q7QBB6

#### ALIGNMENTS

RESULT 1	Q86YP8	PRELIMINARY;	PRT;	91 AA.
ID	Q86YP8			
DT	01-JUN-2003 (TREMBLrel. 24, Created)			
DT	01-JUN-2003 (TREMBLrel. 24, Last sequence update)			
DT	01-OCT-2003 (TREMBLrel. 25, Last annotation update)			
DE	Exon 3-deleted preproghrelin variant.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RA	Jeffery P.L., Herington A.C., Chopin L.K.;			
RL	Submitted (NCV-2002) to the EMBL/GenBank/DBJ databases.			
DR	EMBL; AY184207; AAC27351.1; -			
DR	GO; GO:0005576; C:extracellular; IEA.			
DR	GO; GO:0016608; F:growth hormone-releasing hormone activity; IEA.			
DR	GO; GO:0050791; P:regulation of physiological process; IEA.			
DR	InterPro; IPR011070; AlphaBeta_subunit.			
DR	InterPro; IPR006738; Motilin_ghrelin.			
DR	InterPro; IPR005441; Preproghrelin.			
DR	Pfam; PF04644; Motilin_ghrelin; 1.			
DR	PRINTS; PR01624; GHRELIN.			
DR	SEQUENCE 91 AA; 9972 MW; E7B532D32A3F8609 CRC64;			
SO	SEQUENCE			
Query Match	31.9%; Score 198; DB 2; Length 91;			
Best Local Similarity	88.6%; Pred. No. 1.4e-12;			
Matches	39; Conservative 0; Mismatches 5; Indels 0;			
OY	1 MPSPGTCVCSLLILGMLMIDLAMAGSFLSPHQRVQVPPHKA 44			
DB	1 MPSPGTCVCSLLILGMLMIDLAMAGSFLSPHQRVQVPPHKA 44			
RESULT 2	GHRL_HUMAN	STANDARD;	PRT;	117 AA.
ID	GHRL_HUMAN			
AC	Q9UBU3; Q8TAR9; Q9H3R3;			
DT	28-FEB-2003 (Rel. 41, Created)			
DT	28-FEB-2003 (Rel. 41, Last sequence update)			
DT	25-JAN-2005 (Rel. 46, Last annotation update)			
DE	Ghrelin precursor (Growth hormone secretagogue) (Growth hormone releasing peptide) (Motilin-related peptide) (M46 protein)			
DE	(UNQ524/PRO1066).			
GN	Name=GHRL; Synonyms=MTLRP;			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A. (ISOFORM 1), AND ACYLATION OF SER-26.			
RP	Medline=20067959; PubMed=10604470; DOI=10.1038/45230;			
RX	Medline=20067959; PubMed=10604470; DOI=10.1038/45230;			

RA Kojima M., Hosoda H., Date Y., Nakazato M., Matsuo H., Kangawa K.;  
RT "Ghrelin is a growth-hormone-releasing acylated peptide from  
RL stomach.";  
RN Nature 402:656-660(1999) .  
RN [2]  
RN SEQUENCE FROM N.A. (ISOFORMS 1 AND 2).  
RN RA Kojima M.;  
RN Submitted (DEC-1999) to the EMBL/Genbank/DBJ databases.  
RN [3]  
RN SEQUENCE FROM N.A. (ISOFORM 1).  
RN RC Tomasetto C., Karam S.M., Rio M.-C.;  
RT "Identification of a novel gastric protein m46.";  
RL Submitted (JAN-2000) to the EMBL/Genbank/DBJ databases.  
RN [4]  
RN SEQUENCE FROM N.A. (ISOFORM 1).  
RN RA Majnusz M.P., Ten I.S., Gether J.M., Leibell R.L.;  
RT "Genomic organization of the human ghrelin gene.";  
RL Endocr. Genet. 1:231-233(2000) .  
RN [5]  
RN SEQUENCE FROM N.A. (ISOFORM 1).  
RN RA Clark H.F., Gurney A.L., Abaya E., Baker C., Baldwin D., Brush J.,  
RN Chen J., Chow B., Chui C., Crowley C., Currell B., Deiel B., Dowd J.,  
RN Eaton D., Foster E., Grimaldi C., Gu Q., Haas P.E., Heldens S.,  
RN Huang L., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J.,  
RN Lewis A., Liao D., Mark M., Robbie E., Sanchez C., Schoenfeld J.,  
RN Seebaghi S., Stamescu L., Singh J., Smith V., Stinson J., Vagstad A.,  
RN Vardian R., Watanabe C., Wiand D., Woods K., Xie M.-H., Yamaoka D.,  
RN Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I.,  
RN Gadowaki P., Gray A.;  
RT "The secreted protein discovery initiative (SPDI), a large-scale  
RT effort to identify novel human secreted and transmembrane proteins: a  
RT bioinformatics assessment.";  
RL Genome Res. 13:2265-2270(2003) .  
RN [6]  
RN SEQUENCE FROM N.A. (ISOFORM 1).  
RN RC TISSUE=Blood;  
RX MEDLINE=223881257; PubMed=12477932; DOI=10.1073/pnas.242603899;  
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,  
RA Klausner R.D., Collins F.S., Wagner L., Schenck C.M., Schuler G.D.,  
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,  
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,  
RA DiCicco L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,  
RA Steplonen M., Soares M.B., Bonaldo M.P., Casavant T.L., Scheetz T.E.,  
RA Brownstein M.J., Udell T.B., Toshiyuki S., Carninci P., Prange C.,  
RA Rana S.S., Logguello N.A., Peters G.J., Abramson R.D., Mullany S.J.,  
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,  
RA Richards S., Worley P.C., Hale S., Garcia A.M., Gay L.J., Huhly S.W.,  
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,  
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,  
RA Whiting M., Madan A., Young A.C., Shcherchenko Y., Bouffard G.G.,  
RA Blakeley R.W., Touchman J.W., Green E.D., Dickson M.C.,  
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,  
RA Butcherfield Y.S.N., Krzywicki M.J., Skalska U., Smalins D.E.,  
RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.;  
RT "Generation and initial analysis of more than 15,000 full-length human  
RT and mouse cDNA sequences.";  
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002) .  
RN [7]  
RN SEQUENCE OF 24-33.  
RN RC TISSUE=Stomach;  
RX MEDLINE=20389976; PubMed=10930375;  
RA Tomasetto C., Karam S.M., Ribieras S., Masson R., Lefebvre O.,  
RA Stoub A.C., Alexander G., Chenard M.-P., Rio M.-C.;  
RT "Identification and characterization of a novel gastric peptide  
RT hormone: the motilin-related peptide.";  
RL Gastroenterology 119:395-405(2000) .  
RN [8]  
RN SEQUENCE OF 24-38.  
RX PubMed=15340161; DOI=10.1110/ps.04682504;  
RA Zhang Z., Henzel W.J.;  
RT "Signal peptide prediction based on analysis of experimentally

RT verified cleavage sites." ;  
RN Protein Sci. 13:2819-2824(2004) .  
RL [9]  
RP REVIEW.  
RX MEDLINE=21203998; PubMed=11306336; DOI=10.1016/S1043-2760(00)00362-3;  
RA Kojima M., Hosoda H., Matsuo H., Kangawa K.;  
RT Ghrelin: discovery of the natural endogenous ligand for the growth  
RL hormone secretagogue receptor." ;  
CC Trends Endocrinol. Metab. 12:118-122(2001) .  
CC -I- FUNCTION: Specific ligand for the growth hormone secretaogue  
CC receptor type 1 (GHSR) inducing the release of growth hormone from  
CC the pituitary. Has an appetite-stimulating effect. induces  
CC adiposity and stimulates gastric acid secretion. Involved in  
CC growth regulation.  
CC -I- SUBCELLULAR LOCATION: Secreted.  
CC -I- ALTERNATIVE PRODUCTS:  
CC Event=Alternative splicing; Named isoforms=2;  
CC Name=1; Synonym=Ghrelin;  
CC IsoId=G9UBU3-1; Sequence=Displayed;  
CC Name=2; Synonym=del-Gln14-ghrelin;  
CC IsoId=G9UBU3-2; Sequence=VSP\_003245;  
CC -I- PTR: O-n-octanoylation is essential for activity.  
CC -I- SIMILARITY: Belongs to the mottlin family.  
CC -I- DATABASE: NAME=Ntlas Genet. Cyto genet. Oncol. Haematol.;  
CC WWW="http://www.infobiogen.fr/services/chromancer/Gene/GhrelinID327.html"  
-----  
CC This SWISS-PROT entry is copyright. It is produced through a collaboration  
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CC or send an email to license@ebi.ac.uk).  
-----  
DR EMBL: AB029434; BAB9371.1; -  
DR EMBL: AB035700; BAA19045.1; -  
DR EMBL: AJ252278; CAB65733.1; -  
DR EMBL: AF296558; AAG10300.1; -  
DR EMBL: AY359053; AAC08942.1; -  
DR EMBL: BC025791; AAH25791.1; -  
DR PIR: A59316; A59316.  
DR H-InVDB: HIX0003050; --  
DR MIM: 605353; --  
DR GO: GO:0005615; C:extracellular space; TAS.  
DR GO: GO:0005625; C:soluble fraction; TAS.  
DR GO: GO:0005131; F:growth hormone receptor binding; TAS.  
DR GO: GO:0007267; P:cell-cell signaling; TAS.  
DR GO: GO:0007186; P:G-protein coupled receptor protein signalin. . .; TAS.  
DR InterPro: IPR006737; mottlin\_assoc.  
DR InterPro: IPR006738; mottlin\_ghrelin.  
DR InterPro: IPR005441; Preproghrelin.  
DR Pfam: PF04643; Mottlin\_assoc; 1.  
DR Pfam: PF04644; Mottlin\_ghrelin; 1.  
DR PRINTS: PRO1624; GHRELIN.  
DR ProDom: PD32162; Preproghrelin; 1.  
DR Alternative splicing; Cleavage on pair of basic residues;  
KW Direct protein sequencing; Hormone; Lipoprotein; Signal.  
FT SIGNAL 1 23  
FT PEPTIDE 24 51 Ghrelin.  
FT PROPEP 52 117 Removed in mature form.  
FT LIPID 26 O-octanoyl serine.  
FT VARSPPLIC 37 37 Missing (in isoform 2) .  
FT FT FT FT  
FT FT FT FT  
FT CONFLICT 72 72 L->M (in Ref. 6) .  
SQ SEQUENCE 117 AA; 12911 MW; 39C0572EBEBCA2755 CRC64;

Query Match 31.9%; Score 198; DB 1; Length 117;  
Best Local Similarity 88.6%; Pred. No. 1.9e-12;  
Matches 39; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

1 MPSPGVCSLLILGLMTLDLMAAGSSPSFPHQYQVRPPHKAP 44  
1 MPSPGVCSLLILGLMTLDLMAAGSSPSFPHQYQVRPPHKAP 44

RESULT 3

Q6UDE7 PRELIMINARY; PRT; 117 AA.

AC Q6UDE7; 05-JUL-2004 (TREMBlrel. 27, Created)

DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)

DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)

DE Ghrelin.

GN Name=GhRL;

OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;

OC Cercopithecoidea; Macaca.

NCBI\_TaxID=9544;

OX [1]

RP SEQUENCE FROM N.A.

RX PubMed:14736731; DOI=10.1210/en.2003-1103;

RA Angeloni S.V., Glynn N., Ambrosini G., Garant M.J., Dee Hingley J., Suomi S., Hansen B.C.;

RT "Characterization of the rhesus monkey ghrelin gene and factors influencing ghrelin gene expression and fasting plasma levels."

RL Endocrinology 145:2197-2205(2004).

DR EMBL; AY372274; AA074837.1; -

DR EMBL; AY371689; AA074381.1; -

DR GO; GO:0005576; C:extracellular; IEA.

DR GO; GO:0016608; F:growth hormone-releasing hormone activity; IEA.

DR GO; GO:0050791; P:regulation of physiological processes; IEA.

DR InterPro: IPR011070; Alpha-beta subunit.

DR InterPro: IPR006737; motilin assoc.

DR InterPro: IPR005441; Preproghrelin.

DR InterPro: IPR005441; Preproghrelin.

DR Pfam; PF04643; Motilin\_assoc; 1.

DR Pfam; PF04644; Motilin\_ghrelin; 1.

DR PRINTS; PRO1624; GHRELIN.

DR PRODOM; PD332162; Preproghrelin; 1.

SQ SEQUENCE 117 AA; 12913 MW; 1B634ACELIF19PF CRC64;

Query Match 31.3%; Score 194; DB 2; Length 117;  
Best Local Similarity 86.4%; Pred. No. 4.9e-12;  
Matches 38; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 MPSPGVCSLLLLGMLWDLAMAGSSFLSPHQVQVRPPHPK 44

DB 1 MPSPGVCSLLLLGMLWDLAMAGSSFLSPHQVQVRPPHPK 44

RESULT 4

GHRL\_FELCA STANDARD; PRT; 117 AA.

AC Q6BEG6; Q6BEG5; 25-OCT-2004 (Rel. 45, Created)

DT 25-OCT-2004 (Rel. 45, Last sequence update)

DT 25-OCT-2004 (Rel. 45, Last annotation update)

DE Ghrelin precursor (Growth hormone secretagogue) (Growth hormone releasing peptide) (Motilin-related peptide).

GN Name=GHRL;

OS Fells silvestris catus (Cat).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Eukaryota; Eutheria; Carnivora; Fissipedia; Felidae; Fells.

NCBI\_TaxID=9685;

OX [1]

RP SEQUENCE FROM N.A.

RX TISSUE=Stomach;

RA Lin X., Miyazato M., Kaiya H., Ida T., Kangawa K.;

RT "cDNA cloning of feline and caprine ghrelin."

RL Submitted (JUL-2002) to the EMBL/GenBank/DBJ databases.

CC -1- FUNCTION: Specific ligand for the growth hormone secretagogue receptor type 1 (GHSR) inducing the release of growth hormone from the pituitary. Has an appetite-stimulating effect, induces adiposity and stimulates gastric acid secretion. Involved in growth regulation (By similarity).

CC -1- SUBCELLULAR LOCATION: Secreted.

CC -1- ALTERNATIVE PRODUCTS:

CC Name=1; Synonym=GhrelIn;

CC IsoId=Q6BEG6-1; Sequence=Displayed;

CC Name=2; Synonym=del-Gln14-ghrelin;

CC IsoId=Q6BEG6-2; Sequence=VSP\_011626;

CC -1- PFM: O-n-octanoylation is essential for activity (By similarity).

CC -1- SIMILARITY: Belongs to the motilin family.

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CC -----

DR EMBL; AB089201; BAD34670.1; -

DR EMBL; AB089202; BAD34671.1; -

DR ProDom; PD332162; Preproghrelin; 1.

KW Alternative splicing; Cleavage on pair of basic residues; Hormone; Lipoprotein; Signal.

FT SIGNAL 1 23 By similarity.

FT PEPTIDE 24 51 Ghrelin (By similarity).

FT PROPEP 52 117 Removed in mature form (By similarity).

FT LIPID 26 26 O-octanoyl serine (By similarity).

FT VARSP LIC 37 37 Missing (in isoform 2).

FT FT /FTId=VSP\_011626.

SQ SEQUENCE 117 AA; 12956 MW; 8235A51447FF530 CRC64;

Query Match 29.0%; Score 180; DB 1; Length 117;  
Best Local Similarity 79.5%; Pred. No. 1.3e-10;  
Matches 35; Conservative 1; Mismatches 8; Indels 0; Gaps 0;

QY 1 MPSPGVCSLLLLGMLWDLAMAGSSFLSPHQVQVRPPHPK 44

DB 1 MPSPGVCSLLLLGMLWDLAMAGSSFLSPHQVQVRPPHPK 44

RESULT 5

GHRL\_CAPHI STANDARD; PRT; 116 AA.

AC Q6BEG7; 25-OCT-2004 (Rel. 45, Created)

DT 25-OCT-2004 (Rel. 45, Last sequence update)

DT 25-OCT-2004 (Rel. 45, Last annotation update)

DE Ghrelin precursor (Growth hormone secretagogue) (Growth hormone releasing peptide) (Motilin-related peptide).

GN Name=GHRL;

OS Capra hircus (Goat).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

OC Caprinae; Capra.

NCBI\_TaxID=9925;

OX [1]

RP SEQUENCE FROM N.A.

RX TISSUE=Stomach;

RA Lin X., Miyazato M., Kaiya H., Ida T., Kangawa K.;

RT "cDNA cloning of feline and caprine ghrelin."

RL Submitted (JUL-2002) to the EMBL/GenBank/DBJ databases.

CC -1- FUNCTION: Specific ligand for the growth hormone secretagogue receptor type 1 (GHSR) inducing the release of growth hormone from the pituitary. Has an appetite-stimulating effect, induces adiposity and stimulates gastric acid secretion. Involved in growth regulation (By similarity).

CC -1- SUBCELLULAR LOCATION: Secreted.

CC -1- PFM: O-n-octanoylation is essential for activity (By similarity).

CC -1- SIMILARITY: Belongs to the motilin family.

CC -----

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CC -----



```

DE Exon 4-deleted preproghrelin variant.
GN Name=Chrl;
OS Mus musculus (Mouse);
OC Eukaryota; Metazoa; Chordata; Cranialta; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxId=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Swiss;
RA Jeffrey P.L., Herington A.C., Chopin L.K.;
RL Submitted (NCV-A0027) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY179430-AAO27350.1; -
DR MGD; MGI:1930008; Chrl.
DR GO; GO:0005737; C:cytoplasm; IDA.
DR GO; GO:0005615; C:extracellular space; TAS.
DR GO; GO:0005179; F:hormone activity; TAS.
DR InterPro; IPR011070; AlphaBeta subunit.
DR InterPro; IPR006738; motilin_ghrelin.
DR InterPro; IPR005441; Preproghrelin.
DR Pfam; PF04644; Motilin_ghrelin; 1.
DR PRINTS; PRO1624; GHRELIN.
SQ SEQUENCE      86 AA;  9758 MW;  B913858874770512 CRC64;

Query Match          26.1%; Score 162; DB 2; Length 86;
Best Local Similarity 70.5%; Pred. No. 6.5e-09;
Matches    31; Conservative     4; Mismatches     9; Indels         0; Gaps         0;

Oy      1 MPSPTVCSTLLTGMLWLDLMAAGSSSLSPEDHQRVQVRPHKAP 44
Db      1 MLSSGTICSLILSLMLMDMAMAGSSSLSPEDHQAKQKRKSKP 44

RESULT 9
GHRL_CANFA
ID ID GHRL_CANFA STANDARD; PRT; 117 AA.
AC Q9BEF8; Q9BEF7;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Ghrelin precursor (Growth hormone secretagogue) (Growth hormone
   releasing peptide) (Motilin-related peptide).
DE Name=GHRl; Synonyms=MTRLR;
GN Canis familiaris (Dog).
OS Eukaryota; Metazoa; Chordata; Cranialta; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxId=9615;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2).
RC TISSUE=Gastric fundus;
RA Tomassetto C., Wendling C., Rio M.-C., Polteras P.;
RT "Identification of cDNA encoding MTRLR/pghrelin precursor from dog
   fundus."
RL Submitted (JAN-2001) to the EMBL/GenBank/DBJ databases.
RL FUNCTION: Specific ligand for the growth hormone secretagogue
   receptor type 1 (GHSR) inducing the release of growth hormone from
   the pituitary. Has an appetite-stimulating effect, induces
   adiposity and stimulates gastric acid secretion. Involved in
   growth regulation (By similarity).
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=2;
CC Name=1; Synonyms=GhrelIn;
CC IsoId=Q9BEF8-1; Sequence=Displayed;
CC Name=2; Synonyms=del-Gln14-ghrelin;
CC IsoId=Q9BEF8-2; Sequence=VSP_00344;
CC -1- PTM: O-n-octanoylation is essential for activity (By similarity).
CC -1- SIMILARITY: Belongs to the motilin family.
-----
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CC EMBL, AJ298285; CAC29155.1; -  
 DR AJ298285; CAC29155.1; -  
 DR InterPro; IPR006737; Motilin\_assoc.  
 DR InterPro; IPR006738; Motilin\_ghrelin.  
 DR InterPro; IPR005441; Preproghrelin.  
 DR Pfam; PF04664; Motilin\_assoc.1.  
 DR Pfam; PF04664; Motilin\_ghrelin.1.  
 DR PRINTS; PR01624; GHRELIN.  
 DR ProDom; PD33162; Preproghrelin.1.  
 DR Alternative splicing; Cleavage on pair of basic residues; Hormone;  
 KM Lipoprotein; Signal.  
 FT SIGNAL; 1 23 By similarity.  
 FT PEPTIDE; 24 51 Ghrelin (By similarity).  
 FT PROPEP; 52 117 Removed in mature form (By similarity).  
 FT LIPID; 26 26 O-octanoyl serine (By similarity).  
 FT VARSPIC; 37 37 Missing (in isoform 2).  
 FT /FTid=VSP\_003244.  
 PT SEQUENCE 117 AA; 13007 MW; 3857FED9D1847CF CRC64;

Query Match 26.1%; Score 162; DB 1; Length 117;  
 Best Local Similarity 70.5%; Pred. No. 9.2e-09;  
 Matches 31; Conservative 5; Mismatches 8; Indels 0; Gaps 0;  
 Oy 1 MSPGVCSTLLGLMMLDLMASSFLSPHQVQVPPHKA 44  
 Db 1 MSPGVCSTLLGLMMLDLMASSFLSPHQVQVPPHKA 44

RESULT 10  
 ID Q7TSD1 PRELIMINARY; PRT; 78 AA.  
 AC Q7TSD1;  
 DT 01-OCT-2003 (TREMELrel. 25, Created)  
 DT 01-OCT-2003 (TREMELrel. 25, Last sequence update)  
 DT 01-MAR-2004 (TREMELrel. 26, Last annotation update)  
 DE Ghrelin delta2.  
 GN Name=ghrelin;  
 OS Mus musculus (Mouse).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
 OX NCBI\_TaxID=10090;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA Hsatoml H., Nagao K., Hirata H., Kawano K., Hibi N.,  
 RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.  
 DR EMBL; AB11891; BAC77409.1; -  
 DR GO; GO:0005737; C:cytoplasm; IDA.  
 DR GO; GO:0005615; C:extracellular space; TAS.  
 DR GO; GO:0005179; F:hormone activity; TAS.  
 DR InterPro; IPR006737; motilin\_assoc.  
 DR InterPro; IPR005441; Preproghrelin.  
 DR Pfam; PF04643; Motilin\_assoc.1.  
 DR ProDom; PD33162; Preproghrelin.1.  
 SO SEQUENCE 78 AA; 8615 MW; AD87C85C9A22FFB CRC64;

Query Match 25.6%; Score 158.5; DB 2; Length 78;  
 Best Local Similarity 40.7%; Pred. No. 1.3e-08;  
 Matches 37; Conservative 11; Mismatches 18; Indels 25; Gaps 3;

Oy 1 MSPGVCSTLLGLMMLDLMASSFLSPHQVQVPPHKA 60  
 Db 1 MLSSGTCSTLLGLMMLDLMASSFLSPHQVQVPPHKA 60  
 Oy 61 QQRH-----LMAVSFSQTKDGS 80  
 Db 52 YQHGRLGKFLQDILMEV-----KEAPAD 77

RESULT 11  
 GHRL\_RAT

ID GHRL\_RAT STANDARD; PRT; 117 AA.  
 AC O9QYH7; O9ET69;  
 DT 28-FEB-2003 (Rel. 41, Created)  
 DT 28-FEB-2003 (Rel. 41, Last sequence update)  
 DT 25-OCT-2004 (Rel. 45, Last annotation update)  
 DE Ghrelin precursor (Growth hormone secretagogue) (Growth hormone releasing peptide) (Motilin-related peptide).  
 GN Name=Ghrl;  
 OS Rattus norvegicus (Rat).  
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.  
 OX NCBI\_TaxID=10116;  
 RN [1]  
 RP SEQUENCE FROM N.A. (ISOFORM 1), SEQUENCE OF 24-51, MASS SPECTROMETRY,  
 RP AND ACYLATION OF SER-26.  
 RC STRAIN=Sprague-Dawley; TISSUE=Stomach;  
 RX MEDLINE=20067959; PubMed=10604470; DOI=10.1038/45230;  
 RA Kojima M., Hosoda H., Date Y., Nakazato M., Matsuo H., Kangawa K.;  
 RT "Ghrelin is a growth-hormone-releasing acylated peptide from stomach.";  
 RT Stomach 402:656-660(1999).  
 RL Nature 402:656-660(1999).  
 RN [2]  
 RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2), SEQUENCE OF 24-51, MASS  
 RP SPECTROMETRY, AND ACYLATION OF SER-26.  
 RC STRAIN=Sprague-Dawley; TISSUE=Stomach;  
 RX MEDLINE=20357315; PubMed=10801861; DOI=10.1074/jbc.M002784200;  
 RA Hosoda H., Kojima M., Matsuo H., Kangawa K.;  
 RT "Purification and characterization of rat des-Gln14-ghrelin, a second  
 RT endogenous ligand for the growth hormone secretagogue receptor.";  
 RT J. Biol. Chem. 275:21995-22000(2000).  
 RL J. Biol. Chem. 275:21995-22000(2000).  
 RN [3]  
 RP CHARACTERIZATION.  
 RX MEDLINE=21092536; PubMed=11162448; DOI=10.1006/bbrc.2000.4039;  
 RA Hosoda H., Kojima M., Matsuo H., Kangawa K.;  
 RT "Ghrelin and des-acyl ghrelin: two major forms of rat ghrelin peptide  
 RT in gastrointestinal tissue.";  
 RL Biochem. Biophys. Res. Commun. 279:909-913(2000).  
 RN [4]  
 RP STRUCTURE-ACTIVITY RELATIONSHIP.  
 RX MEDLINE=21433488; PubMed=11549267; DOI=10.1006/bbrc.2001.5553;  
 RA Matsunoto M., Hosoda H., Kitajima Y., Morozumi N., Minamide Y.,  
 RA Tanaka S., Matsuo H., Kojima M., Hayashi Y., Kangawa K.;  
 RT "Structure-activity relationship of ghrelin: pharmacological study of  
 RT ghrelin peptides.";  
 RL Biochem. Biophys. Res. Commun. 287:142-146(2001).  
 RN [5]  
 RP REVIEW.  
 RX MEDLINE=21203998; PubMed=11306336; DOI=10.1016/S1043-2760(00)00362-3;  
 RA Kojima M., Hosoda H., Matsuo H., Kangawa K.;  
 RT "Ghrelin: discovery of the natural endogenous ligand for the growth  
 RT hormone secretagogue receptor.";  
 RL Trends Endocrinol. Metab. 12:118-122(2001).  
 CC -1- FUNCTION: Specific ligand for the growth hormone secretagogue  
 CC receptor type 1 (GHSR) inducing the release of growth hormone from  
 CC the pituitary. Has an appetite-stimulating effect, induces  
 CC adiposity and stimulates gastric acid secretion. Involved in  
 CC growth regulation.  
 CC -1- SUBCELLULAR LOCATION: Secreted.  
 CC -1- ALTERNATIVE PRODUCTS:  
 CC Event=Alternative splicing; Named isoforms=2;  
 CC Name=1; Synonyms=Ghreltin;  
 CC IsoId=Q9QYH7-1; Sequence=Displayed;  
 CC Name=2; Synonyms=del-Gln14-ghrelin;  
 CC IsoId=Q9QYH7-2; Sequence=VSP\_003248;  
 CC -1- TISSUE SPECIFICITY: Broadly expressed with higher expression in  
 CC the stomach. Very low levels are detected in the hypothalamus,  
 CC heart, lung, pancreas, intestine and adipose tissue.  
 CC -1- PTM: O-n-octanoylation is essential for activity. The replacement  
 CC of Ser-26 by aromatic tryptophan preserves ghrelin activity.  
 CC -1- MASS SPECTROMETRY: MW=3314.9; MW ERR=0.7; METHOD=Electrospray;  
 CC RANGE=24-51 (Q9QYH7-1); NOTE=Ref.1.  
 CC -1- MASS SPECTROMETRY: MW=3187.1; MW ERR=0.6; METHOD=Electrospray;  
 CC RANGE=24-50 (Q9QYH7-2); NOTE=Ref.2.



CC -1- SIMILARITY: Belongs to the motilin family.  
 CC -----  
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 CC or send an email to [license@ib-sib.ch](mailto:license@ib-sib.ch)).  
 CC -----  
 CC EMBL; AB029433; BA89370.1; -  
 CC EMBL; AB035699; BAB11956.1; -  
 CC PIR; B59316; B59316.  
 CC InterPro; IPR006737; motilin\_assoc.  
 CC InterPro; IPR006738; motilin\_ghrelin.  
 CC InterPro; IPR005441; Preproghrelin.  
 CC Pfam; PF04643; Motilin\_assoc; 1.  
 CC Pfam; PF04644; Motilin\_ghrelin; 1.  
 CC PRINTS; PR01624; GHRELIN.  
 CC ProDom; PD332162; Preproghrelin; 1.  
 CC -----  
 CC KM Alternative splicing; Cleavage on pair of basic residues;  
 CC Direct protein sequencing; Hormone; Lipoprotein; Signal.  
 CC SIGNAL  
 CC FT 1 23  
 CC PEPITIDE 24 51 Ghrelin.  
 CC PROPEP 52 117 Removed in mature form.  
 CC LIPID 26 26 Octanoyl serine.  
 CC VARSPLIC 37 37 Missing (in isoform 2).  
 CC FT FTID=VSP\_003248.  
 CC SQ SEQUENCE 117 AA; 13176 MW; 8857546F851A7691 CRC64;  
 CC -----  
 CC Query Match 25.5%; Score 158; DB 1; Length 117;  
 CC Best Local Similarity 40.0%; Pred. No. 2.4e-08;  
 CC Matches 42; Conservative 7; Mismatches 34; Indels 22; Gaps 2;  
 CC -----  
 CC QY 1 MPSPGTVCSTLLLGMLWLDLMAAGSSFLSPHQVQVPPHKAHVVPALPLSNQCDLE 60  
 CC Db 1 MVSATITCSLLLSVLMADLMAAGSSFLSPHQVQVPPHKAHVVPALPLSNQCDLE 54  
 CC QY 61 QGRH-----LMASVFSOSTDGSGLTVSGRTWG 89  
 CC Db 55 GMLHPEDRGAEAEAELEIRFNAFVDVGIKLSGAQVQGRALG 99  
 CC -----  
 CC RESULT 12  
 CC Q863L0 PRELIMINARY; PRT; 116 AA.  
 CC AC Q863L0;  
 CC DT 01-JUN-2003 (TREMblrel. 24, Created)  
 CC DT 01-JUN-2003 (TREMblrel. 24, Last sequence update)  
 CC DT 01-OCT-2003 (TREMblrel. 25, Last annotation update)  
 CC DE Preproghrelin precursor.  
 CC OS Ovis aries (Sheep).  
 CC OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 CC OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 CC OC Caprinae; Ovis.  
 CC NCBI\_TaxID=9940;  
 CC RN [1]  
 CC RP SEQUENCE FROM N.A.  
 CC RC TISSUE=Stomach;  
 CC RA Doi K., Kojima M., Hosoda H., Matsuo H., Kangawa K.;  
 CC RL Submitted (ABR-2001) to the EMBL/GenBank/DBJ databases.  
 CC DR EMBL; AB060699; BAC75928.1; -  
 CC DR GO; GO:0005576; C:extracellular; IEA.  
 CC DR GO; GO:0016608; F:growth hormone-releasing hormone activity; IEA.  
 CC DR GO; GO:0050791; P:regulation of physiological process; IEA.  
 CC DR InterPro; IPR011070; AlphaBeta\_subunit.  
 CC DR InterPro; IPR006737; motilin\_assoc.  
 CC DR InterPro; IPR006738; motilin\_ghrelin.  
 CC DR InterPro; IPR005441; Preproghrelin.  
 CC DR Pfam; PF04643; Motilin\_assoc; 1.  
 CC DR Pfam; PF04644; Motilin\_ghrelin; 1.  
 CC DR PRINTS; PR01624; GHRELIN.  
 CC DR ProDom; PD332162; Preproghrelin; 1.

KM Signal.  
 FT SIGNAL 1 23 Potential.  
 FT CHAIN 24 50 ghrelin.  
 FT SEQUENCE 116 AA; 12977 MW; B78ECA3DBF05686 CRC64;  
 SQ SEQUENCE 40; Conservative 14; Mismatches 35; Indels 9; Gaps 2;  
 CC -----  
 CC Query Match 25.4%; Score 157.5; DB 2; Length 116;  
 CC Best Local Similarity 40.8%; Pred. No. 2.6e-08;  
 CC Matches 40; Conservative 14; Mismatches 35; Indels 9; Gaps 2;  
 CC -----  
 CC QY 1 MPSPGTVCSTLLLGMLWLDLMAAGSSFLSPHQVQVPPHKAHVVPALPLSNQCDLE 59  
 CC Db 1 MPAPRTYVSLLSLMLWMDLMAAGSSFLSPHQVQVPPHKAHVVPALPLSNQCDLE 60  
 CC QY 60 EQGRH-----LMASVFSOSTDGSGLTVSGRTWG 89  
 CC Db 61 GSQEGAEDELIRFNAFVNIIGIKLSGASQSLQHGQTIG 98  
 CC -----  
 CC RESULT 13  
 CC Q67BB5 PRELIMINARY; PRT; 74 AA.  
 CC AC Q67BB5;  
 CC DT 25-OCT-2004 (TREMblrel. 28, Created)  
 CC DT 25-OCT-2004 (TREMblrel. 28, Last sequence update)  
 CC DT 25-OCT-2004 (TREMblrel. 28, Last annotation update)  
 CC DE Ghrelin (Fragment).  
 CC OS Sus scrofa (Pig).  
 CC OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.  
 CC NCBI\_TaxID=9823;  
 CC RN [1]  
 CC RP SEQUENCE FROM N.A.  
 CC RA Kim K.-S., Rothchild M.F.;  
 CC RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.  
 CC DR EMBL; AY373019; AAR24571.1; -  
 CC DR InterPro; IPR006738; motilin\_ghrelin.  
 CC DR InterPro; IPR005441; Preproghrelin.  
 CC DR Pfam; PF04644; Motilin\_ghrelin; 1.  
 CC DR PRINTS; PR01624; GHRELIN.  
 CC DR NON\_TER 74  
 CC FT SEQUENCE 74 AA; 7980 MW; 875424C2D41FC16 CRC64;  
 CC -----  
 CC Query Match 24.3%; Score 150.5; DB 2; Length 74;  
 CC Best Local Similarity 71.1%; Pred. No. 8.3e-08;  
 CC Matches 32; Conservative 4; Mismatches 8; Indels 1; Gaps 1;  
 CC -----  
 CC QY 1 MPSPGTVCSTLLLGMLWLDLMAAGSSFLSPHQVQVPPHKAHVVPALPLSNQCDLE 44  
 CC Db 1 MVSATITCSLLLSVLMADLMAAGSSFLSPHQVQVPPHKAHVVPALPLSNQCDLE 45  
 CC QY 1 MPSPGTVCSTLLLGMLWLDLMAAGSSFLSPHQVQVPPHKAHVVPALPLSNQCDLE 44  
 CC Db 1 MVSATITCSLLLSVLMADLMAAGSSFLSPHQVQVPPHKAHVVPALPLSNQCDLE 45  
 CC -----  
 CC RESULT 14  
 CC GHRL\_PIG STANDARD; PRT; 118 AA.  
 CC AC Q9GKT5; Q9GKT5; Q9GKT4;  
 CC DT 28-FEB-2003 (Rel. 41, Created)  
 CC DT 28-FEB-2003 (Rel. 41, Last sequence update)  
 CC DT 25-OCT-2004 (Rel. 45, Last annotation update)  
 CC DE Ghrelin precursor (Growth hormone secretagogue) (Growth hormone  
 CC releasing peptide) (Motilin-related peptide).  
 CC GN Name=GHRL.  
 CC OS Sus scrofa (Pig).  
 CC OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.  
 CC NCBI\_TaxID=9823;  
 CC RN [1]  
 CC RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2).  
 CC RA Kojima M.;  
 CC RL Submitted (DEC-1999) to the EMBL/GenBank/DBJ databases.  
 CC RN [2]  
 CC RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2).  
 CC RC TISSUE=Stomach;

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RA  Rousseau J., Lacroix D., Dubreuil P.;
RL Submitted (MAR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: Specific ligand for the growth hormone secretagogue
CC receptor type 1 (GHSR) inducing the release of growth hormone from
CC the pituitary. Has an appetite-stimulating effect. Induces
CC adiposity and stimulates gastric acid secretion. Involved in
CC growth regulation (By similarity).
CC -1- SUBCELLULAR LOCATION: Secreted (By similarity).
CC -1- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=2;
CC Name=1; Synonyms=Ghrelin;
CC IsoId=G9GKX5-1; Sequence=Displayed;
CC Name=2; Synonyms=del-Gln4-ghrelin;
CC IsoId=G9GKX5-2; Sequence=VSP_003247;
CC -1- PFM: O-n-octanoylation is essential for activity (By similarity).
CC -1- SIMILARITY: Belongs to the motilin family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; AB035703; BAB19048.1; -
DR EMBL; AB035704; BAB19049.1; -
DR EMBL; AF308930; AAK19243.1; -
DR EMBL; AY028942; AAK30002.1; -
DR InterPro; IPR006737; motilin_assoc.
DR InterPro; IPR006738; motilin_ghrelin.
DR InterPro; IPR005441; Preproghrelin.
DR Pfam; PF04643; Motilin_assoc; 1.
DR Pfam; PF04644; Motilin_ghrelin; 1.
DR PRINTS; PR01624; GHRELIN.
DR ProDom; PD332162; Preproghrelin; 1.
KW Alternative splicing; Cleavage on pair of basic residues; Hormone;
KW Lipoprotein; Signal.
KW SIGNAL.
FT SIGNAL. 1 24 By similarity.
FT PEPTIDE 25 52 Ghrelin.
FT PROPEP 53 118 Removed in mature form (By similarity).
FT LIPID 27 27 O-octanoyl serine (By similarity).
FT VARSPIC 38 38 Missing (in isoform 2).
FT /FTid=VSP_003247.
FT CONFLICT 17 17 L -> P (in Ref. 2; AAK30002).
FT CONFLICT 72 72 K -> E (in Ref. 2; AAK30002).
SQ SEQUENCE 118 AA; 12785 MW; 856D3B1D6DAB1A76 CRC64;

Query Match 24.3%; Score 150.5; DB 1; Length 118;
Best Local Similarity 71.1%; Pred. No. 1.4e-07;
Matches 32; Conservative 4; Mismatches 8; Indels 1; Gaps 1;

QY 1 MPSPGVCSLLILGMLNL-DLMAAGSSFLSPHQRVQVPPHKA 44
   |||||:|||||:|||||:|||||:|||||:|||||:
Db 1 MPSTGTICSLILSVLIMADLMAAGSSFLSPHQKVRQKRPK 45

RESULT 15
Q6SLG1 PRELIMINARY; PRT; 54 AA.
AC Q6SLG1;
DT 05-JUL-2004 (TREMBLrel. 27, Created)
DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)
DE Ghrelin (Fragment).
OS Capra hircus (Goat).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Capra.
OX NCBI_TaxID=9925;
RN [1]
RP SEQUENCE FROM N.A.
RA Dickin J.C., Thue T.D., Buchanan F.C.;

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RL Submitted (NOV-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY455985; AAB67351.1; -.
DR GO; GO:0005576; C:extracellular; IEA.
DR GO; GO:0016008; F:growth hormone-releasing hormone activity; IEA.
DR GO; GO:0050791; P:regulation of physiological process; IEA.
DR InterPro; IPR006738; motilin_ghrelin.
DR Pfam; PF04644; Motilin_ghrelin; 1.
DR PRINTS; PR01624; GHRELIN.
FT NON_TER 1 54
SQ SEQUENCE 54 AA; 6095 MW; C7FB81F0BE0B5E98 CRC64;

Query Match 23.7%; Score 147; DB 2; Length 54;
Best Local Similarity 75.0%; Pred. No. 1.3e-07;
Matches 27; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

QY 7 VCSLLILGMLMLDLMAAGSSFLSPHQRVQVPPHKA 42
   :|||||:|||||:|||||:|||||:|||||:
Db 1 ICSLLILSLMLDLMAAGSSFLSPHQKVRQKRPK 36

Search completed: July 26, 2005, 14:26:18
Job time : 181 secs

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